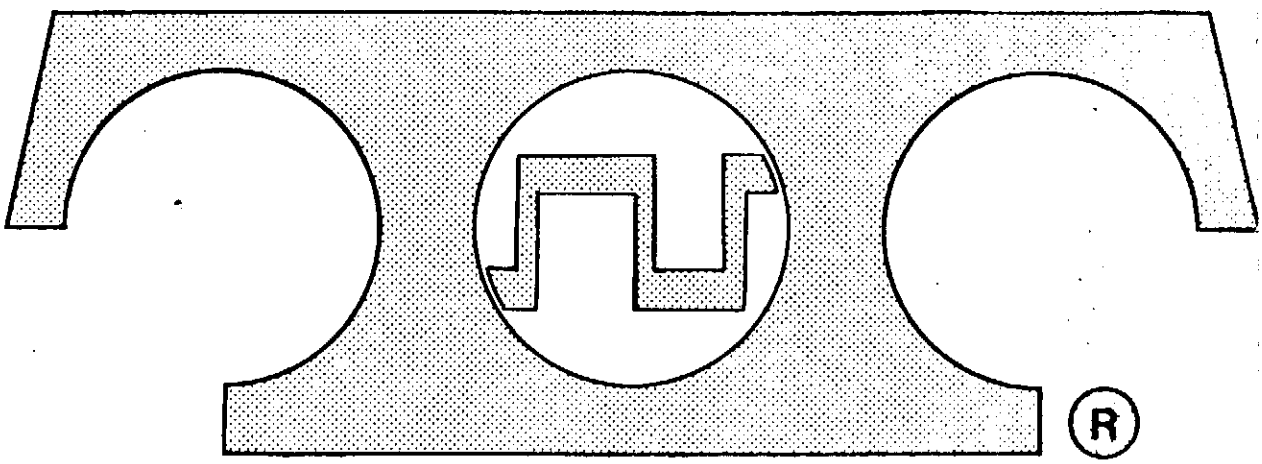
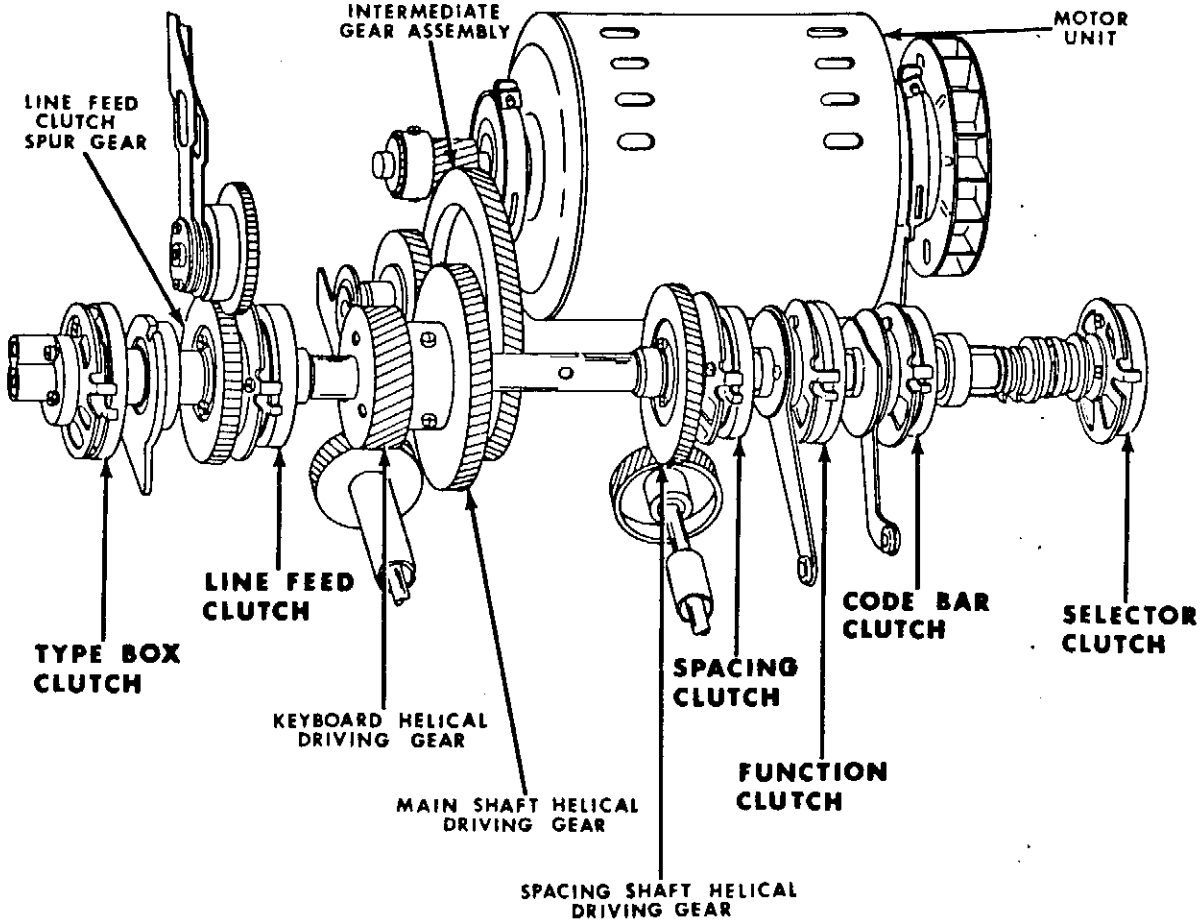
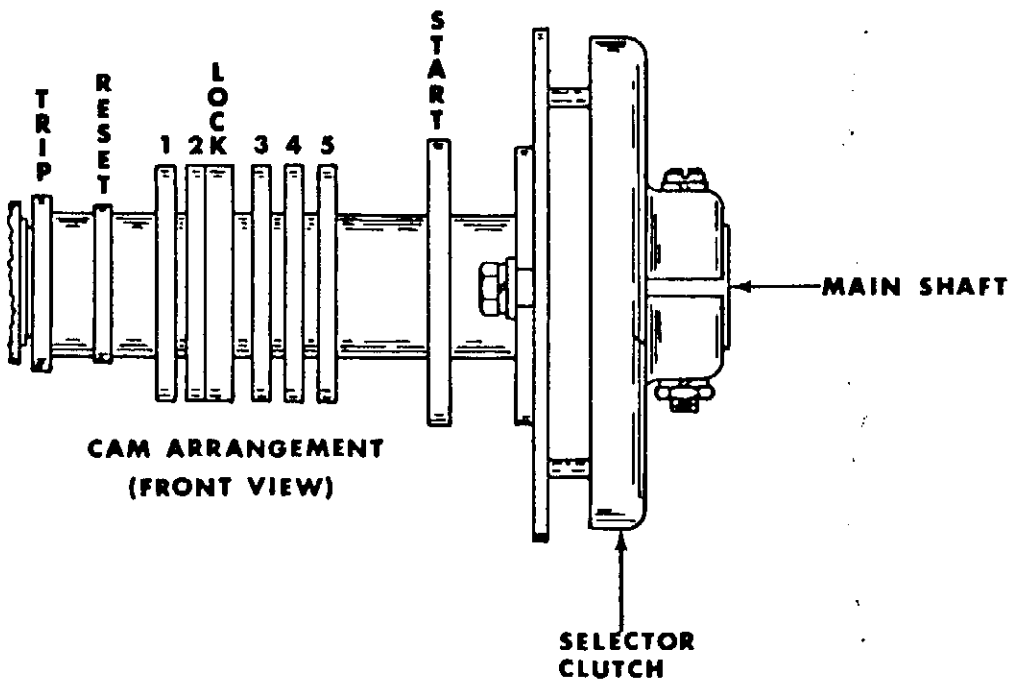
TELETYPE CORP.



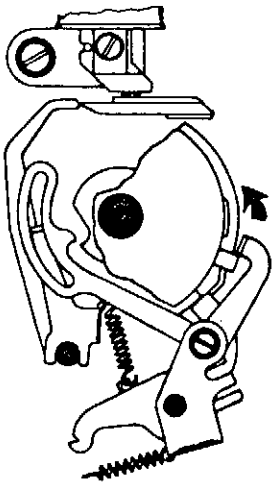
PRINTER

FOR INSTRUCTIONAL PURPOSES ONLY

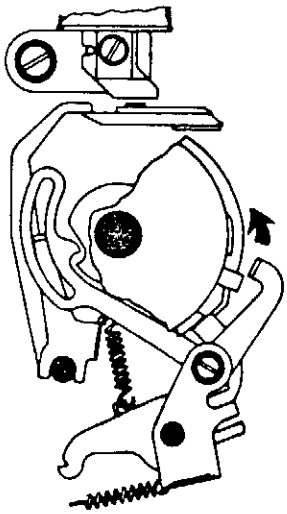




CAM ARRANGEMENT
(FRONT VIEW)

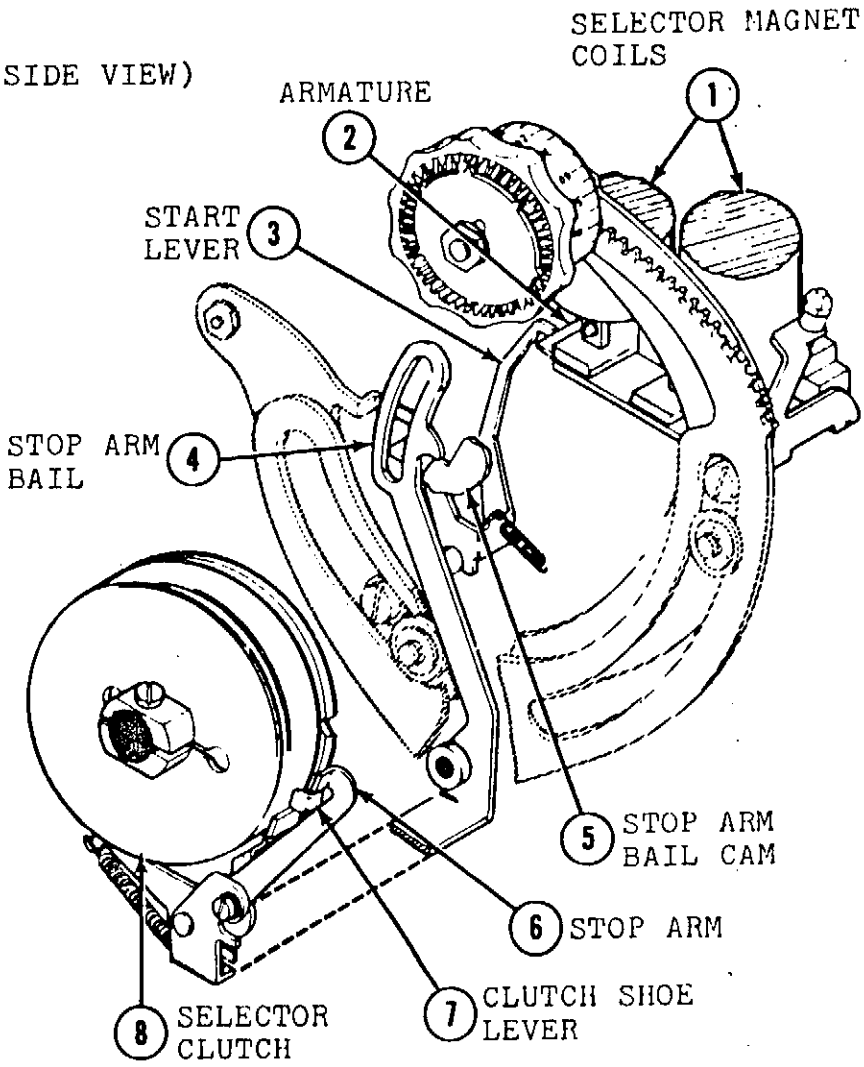


STOP

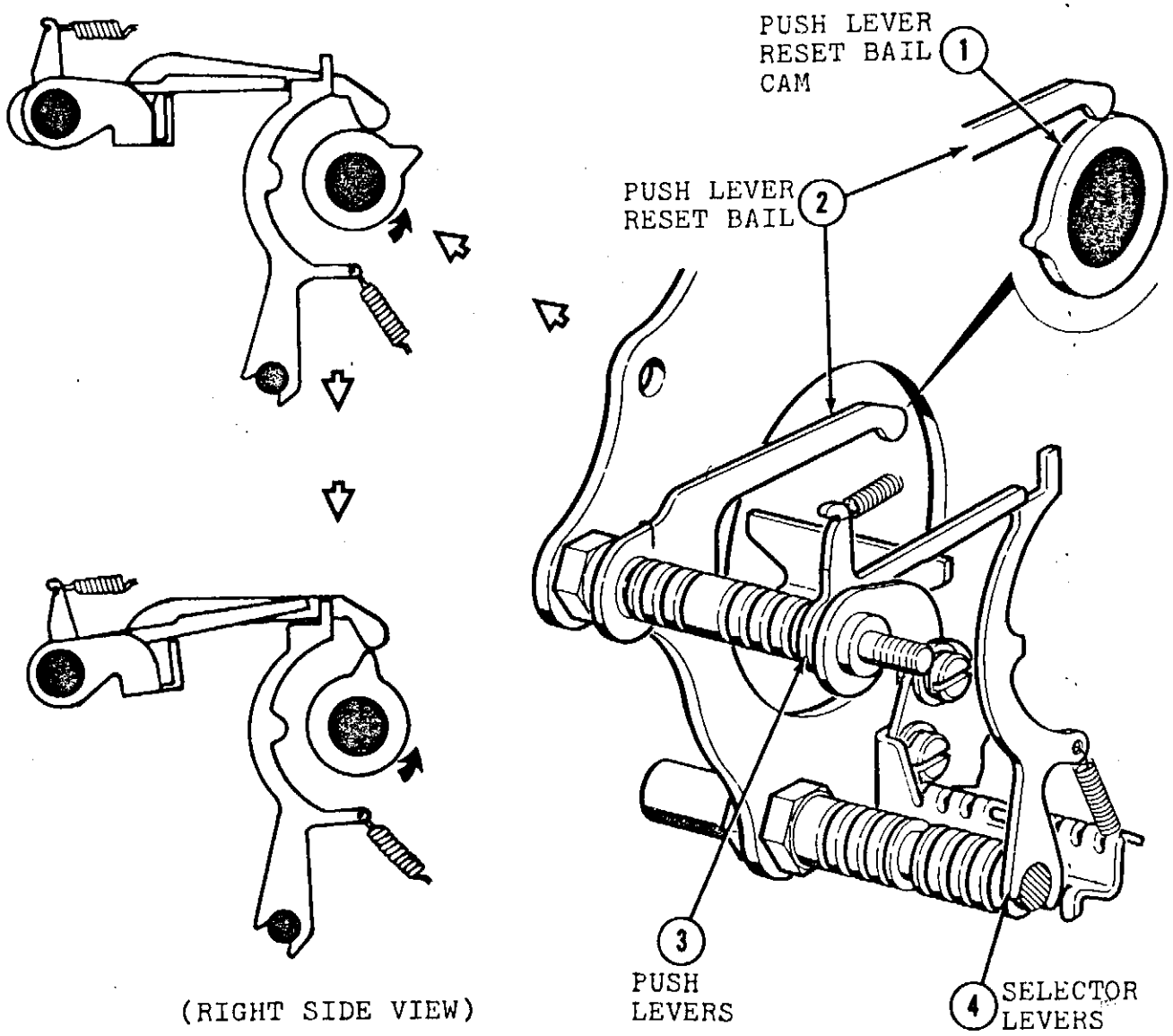


START

(RIGHT SIDE VIEW)

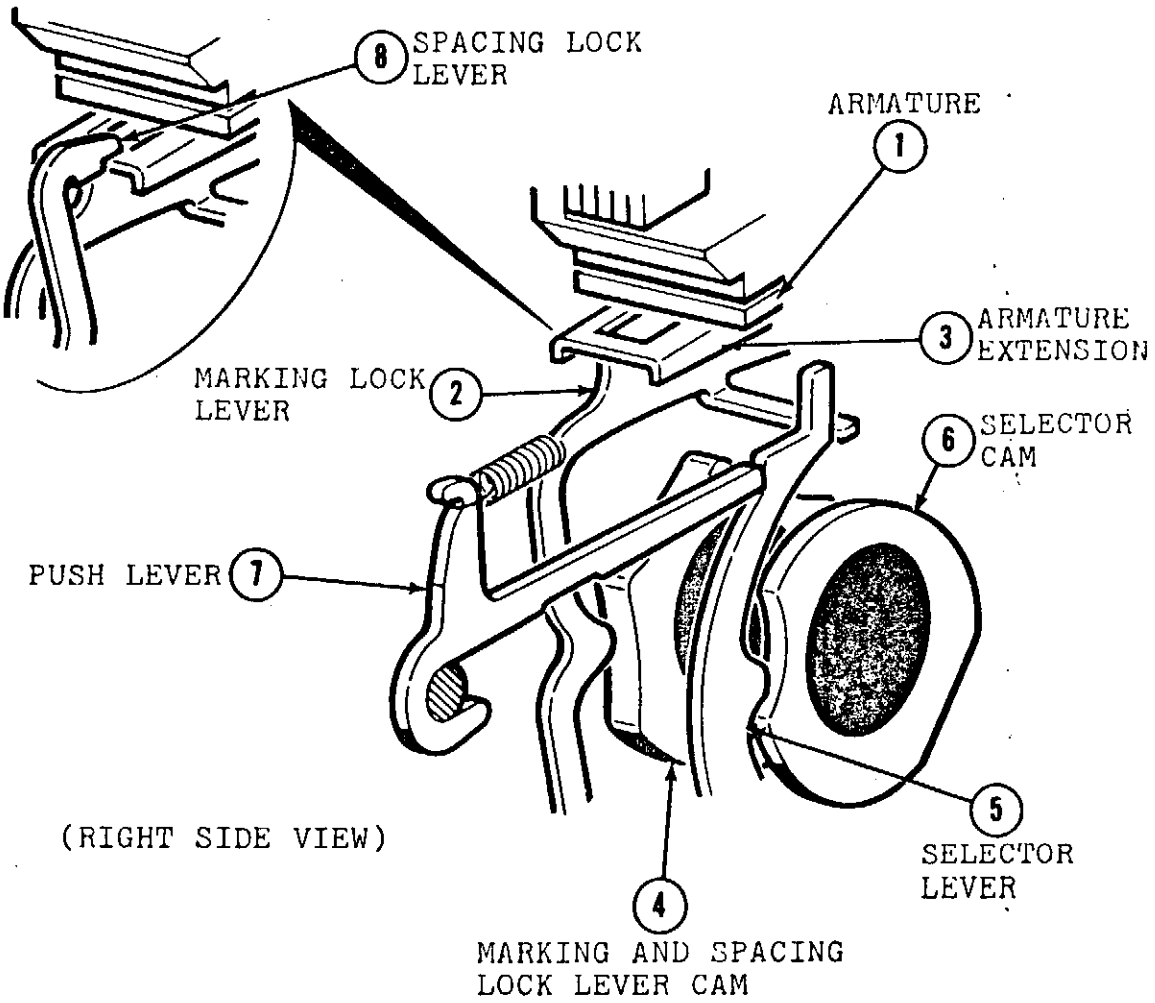


Start pulse received in SELECTOR MAGNET COILS (1) releases ARMATURE (2), unblocking START LEVER (3). STOP ARM BAIL (4) projection drops into indent on STOP ARM BAIL CAM (5), pivoting STOP ARM (6) from CLUTCH SHOE LEVER (7), engaging SELECTOR CLUTCH (8). As STOP ARM BAIL CAM (5) rotates it forces STOP ARM BAIL (4) to high part of cam clearing START LEVER (3) and positioning STOP ARM (6) to disengage SELECTOR CLUTCH (8).



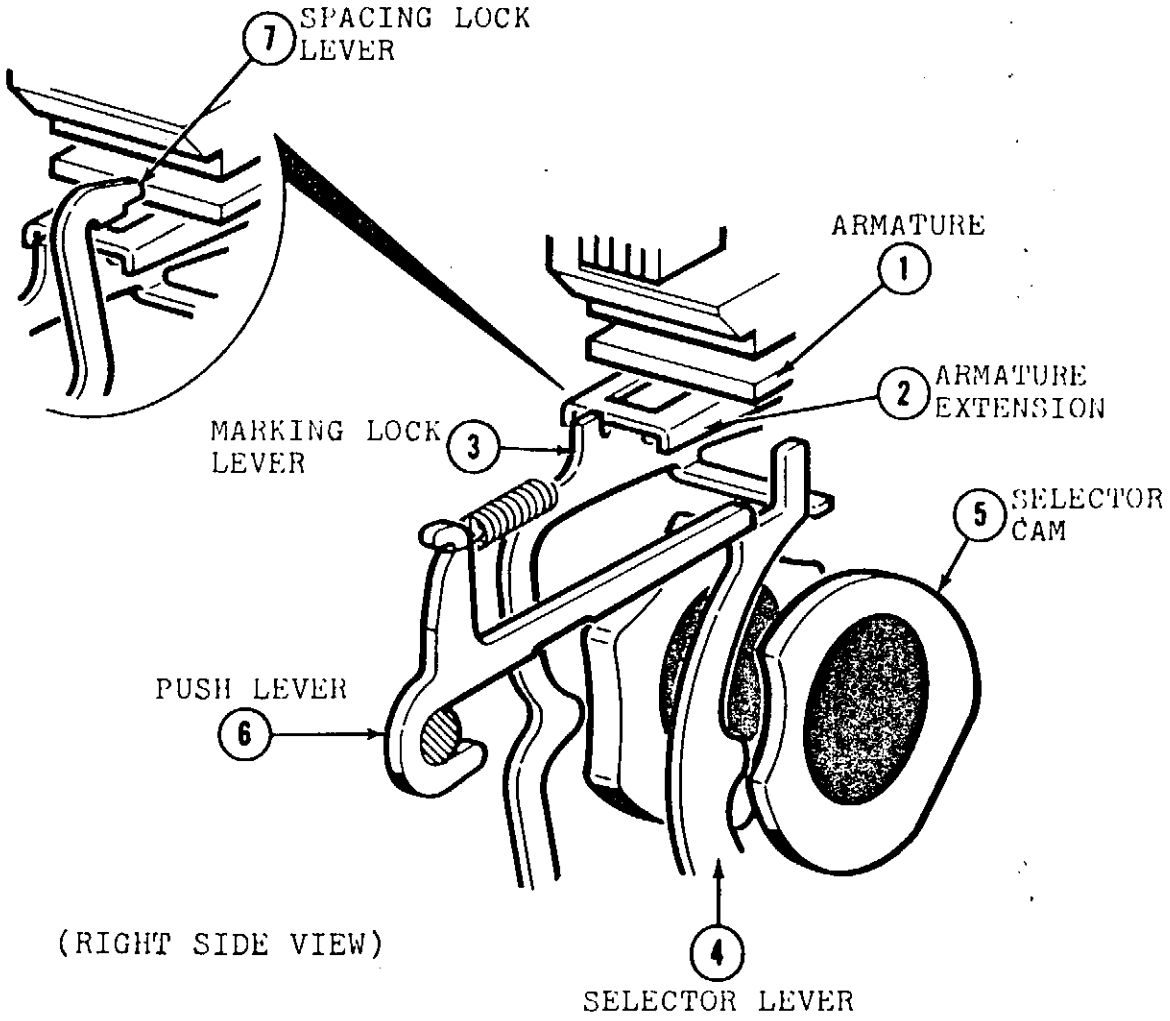
(RIGHT SIDE VIEW)

During start pulse PUSH LEVER RESET BAIL CAM (1) raises PUSH LEVER RESET BAIL (2). As PUSH LEVER RESET BAIL (2) raises, it lifts PUSH LEVERS (3) from their selected or unselected position. Following this "stripping" action, PUSH LEVERS (3) come to rest on steps of SELECTOR LEVERS (4) as PUSH LEVER RESET BAIL (2) comes off of high part of PUSH LEVER RESET BAIL CAM (1). In this position, PUSH LEVERS (3) are all in a spacing condition.



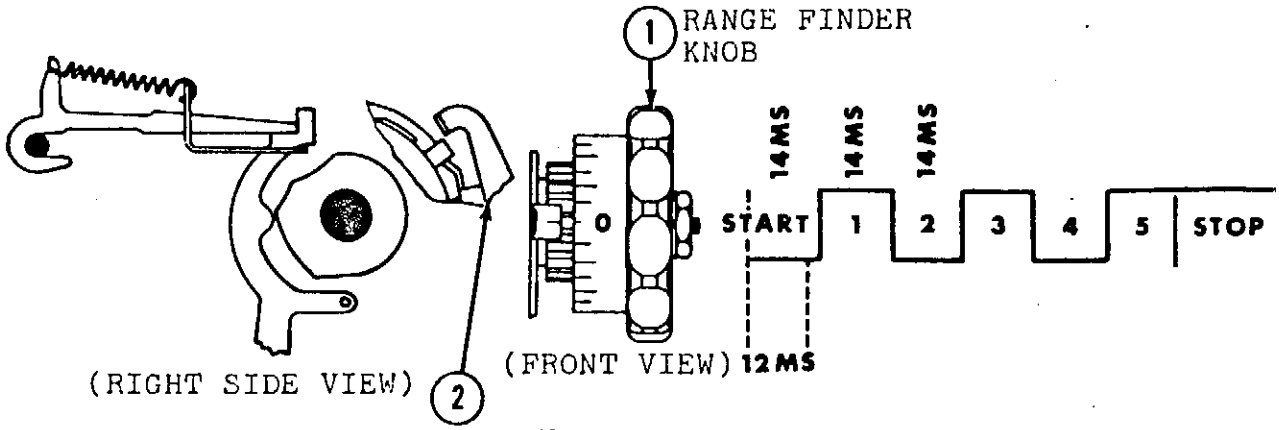
Marking Condition: (Current)

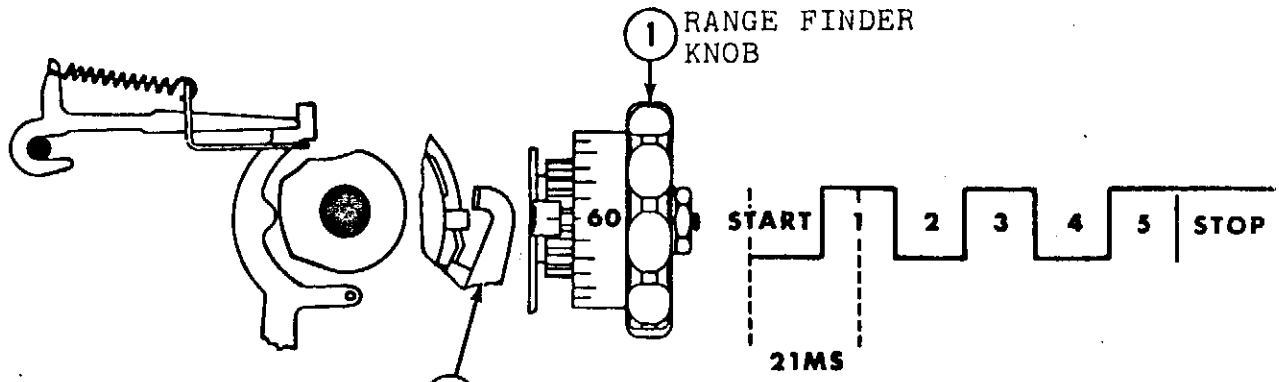
ARMATURE (1) attracted (marking) allows MARKING LOCK LEVER (2) to undertravel ARMATURE EXTENSION (3) riding indent of MARKING AND SPACING LOCK LEVER CAM (4). MARKING LOCK LEVER (2) extensions no longer block SELECTOR LEVER (5) from riding indent of its SELECTOR CAM (6). PUSH LEVER (7) drops off SELECTOR LEVER (5) shelf and is moved left when SELECTOR LEVER (5) rides high part of its SELECTOR CAM (6). SPACING LOCK LEVER (8) blocked by ARMATURE EXTENSION (3) rides in mid-air opposite indent of MARKING AND SPACING LOCK LEVER CAM (4).

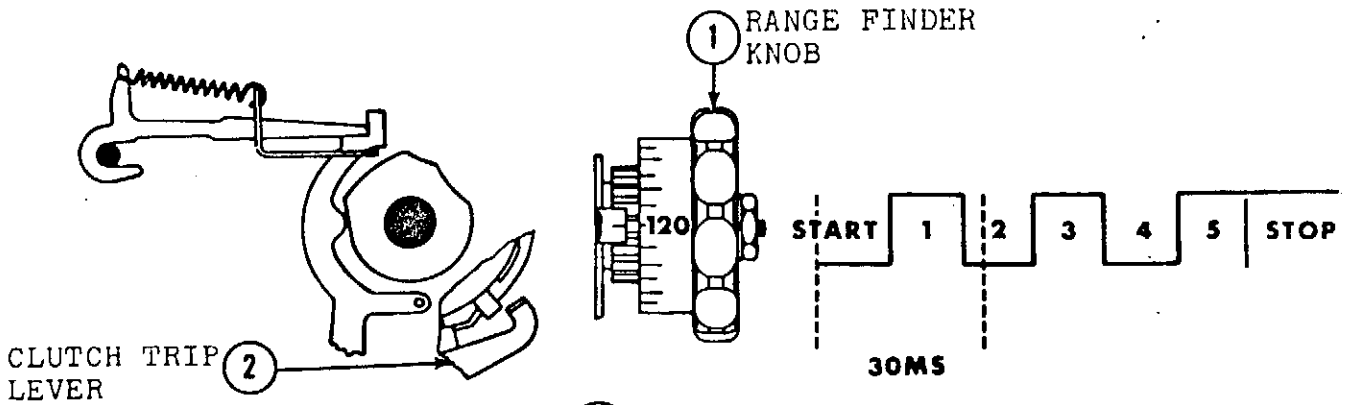


Spacing Condition: (No Current)

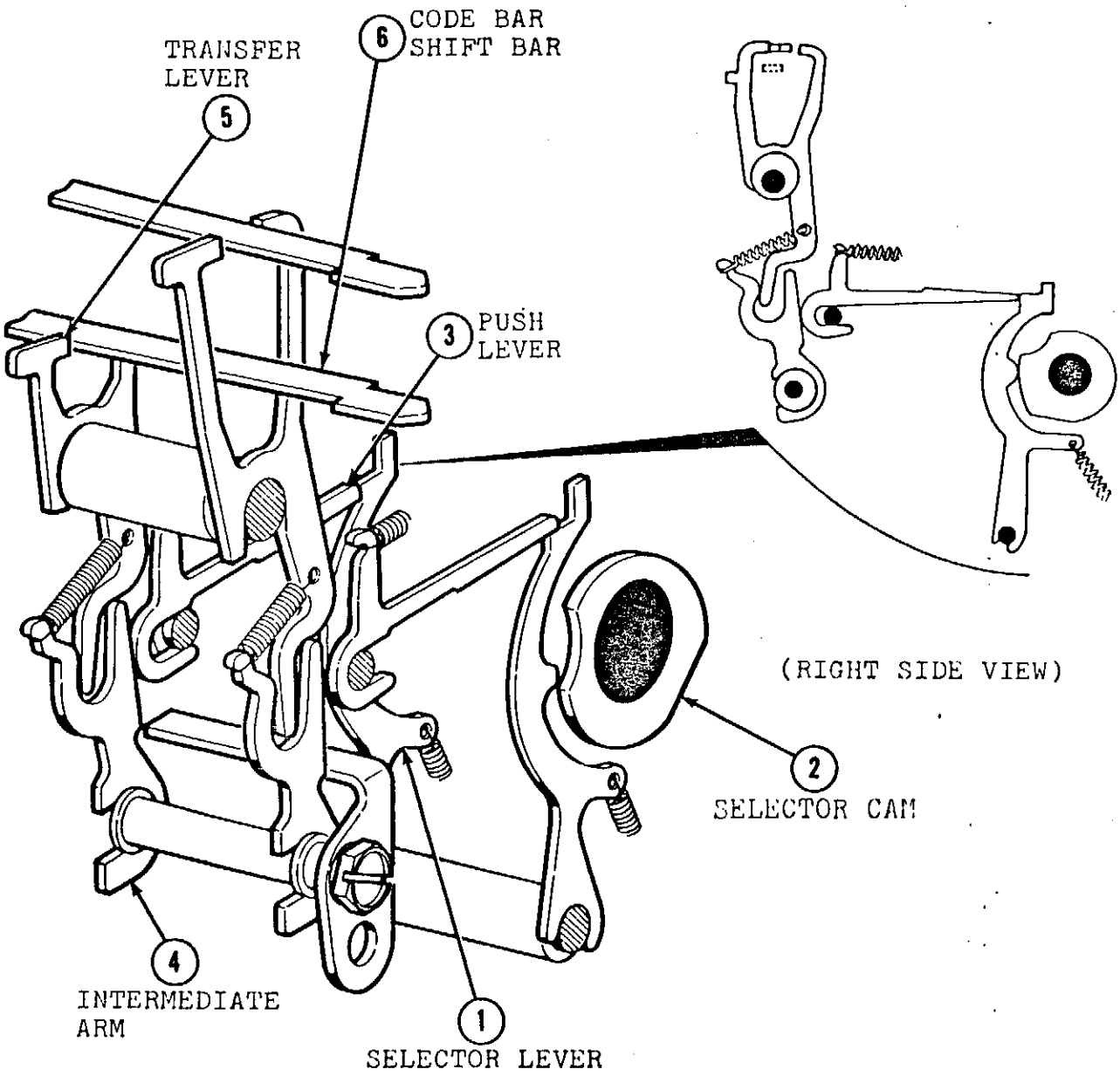
If ARMATURE (1) is unattracted (spacing), ARMATURE EXTENSION (2) blocks MARKING LOCK LEVER (3). MARKING LOCK LEVER (3) extensions block SELECTOR LEVER (4) from riding indent of its SELECTOR CAM (5). PUSH LEVER (6) remains on SELECTOR LEVER (4) shelf (spacing). SPACING LOCK LEVER (7) overrides ARMATURE EXTENSION (2) insuring that ARMATURE (1) remains spacing for entire pulse.





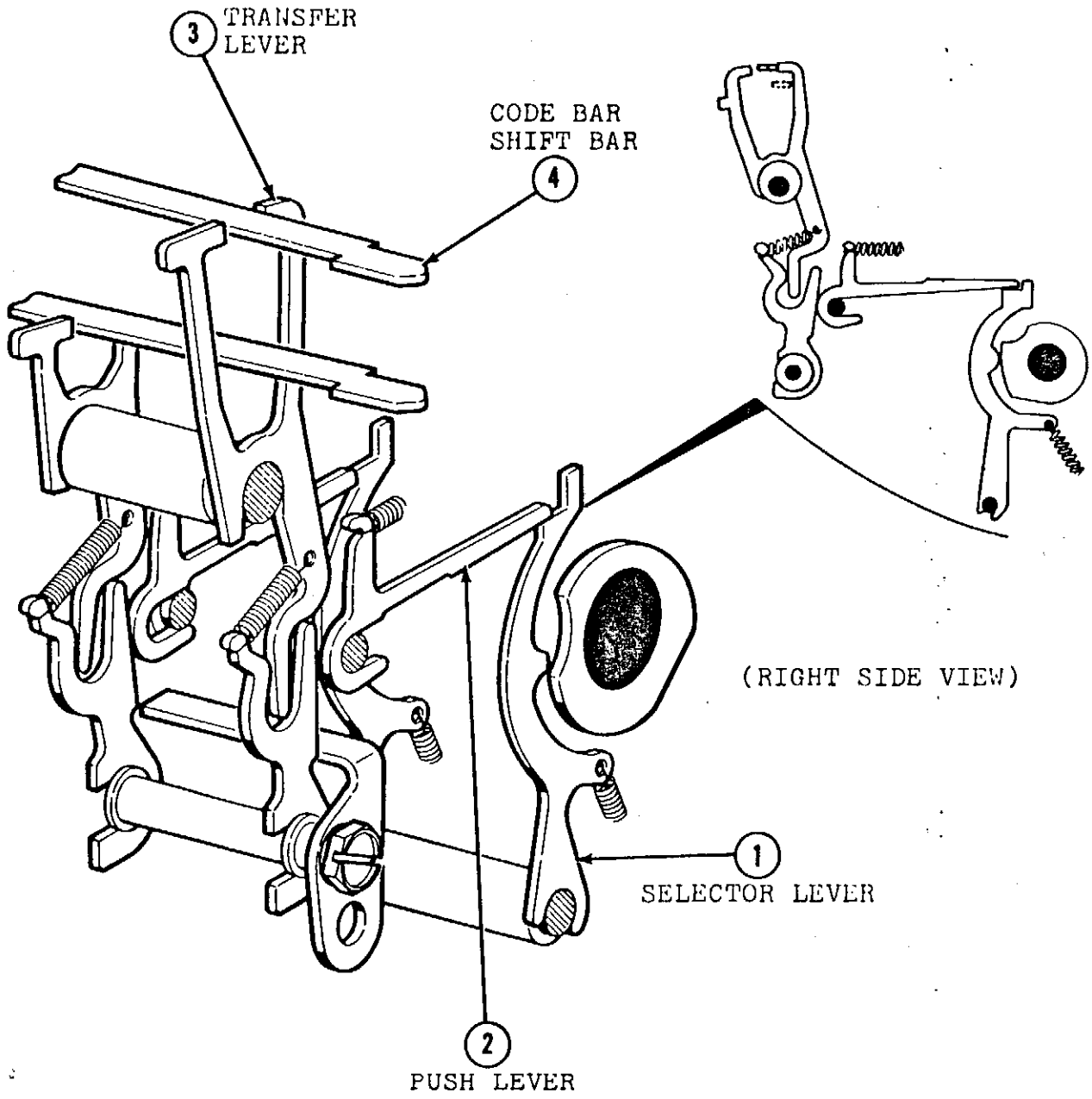


Moving RANGE FINDER KNOB (1) alters position of CLUTCH TRIP LEVER (2). This action determines where selector begins and ends its cycle. It also alters various cams in respect to their associated levers. This determines time in which a code element is sampled.



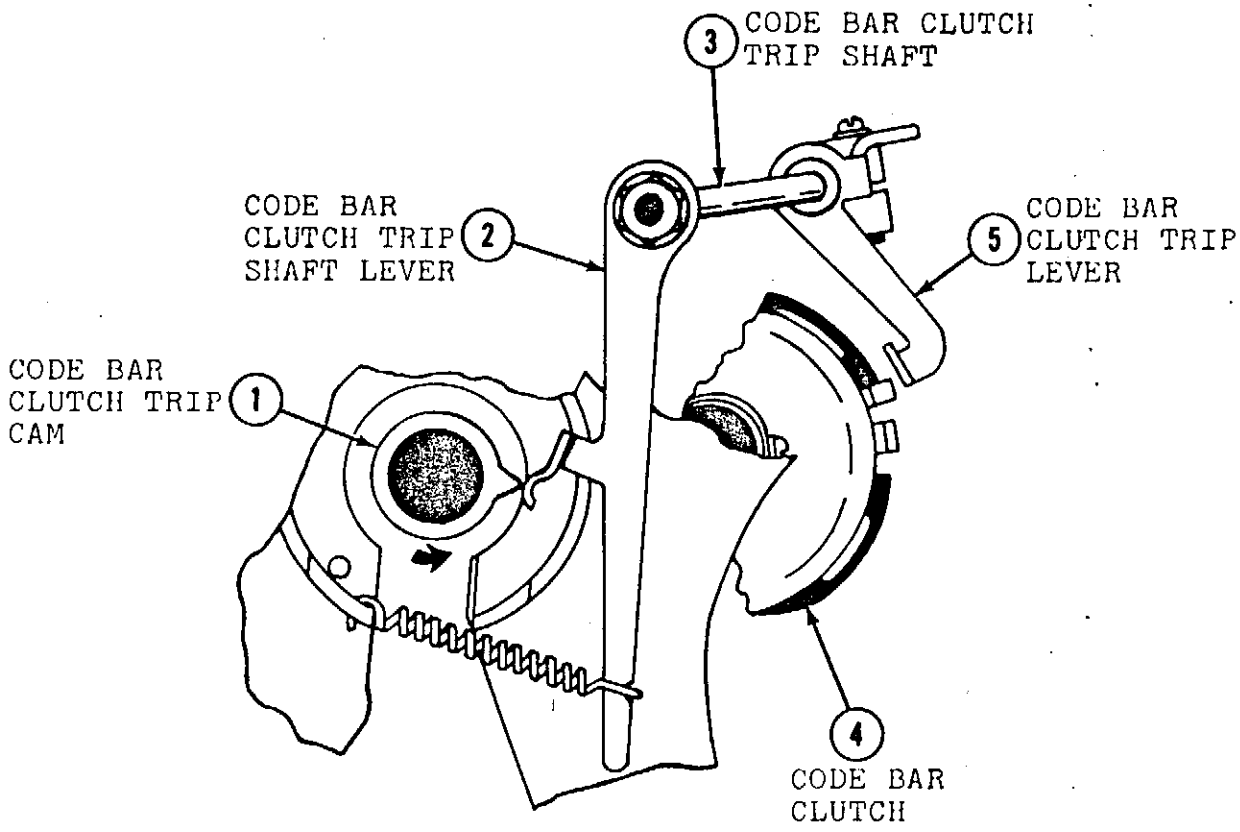
Marking Condition:

When SELECTOR LEVER (1) is allowed to fall into indent of its SELECTOR CAM (2), related PUSH LEVER (3) when driven marking, will rotate INTERMEDIATE ARM (4) counterclockwise and rotate TRANSFER LEVER (5) clockwise to set up a marking condition. TRANSFER LEVER (5) will move CODE BAR SHIFT BAR (6) rearward into a marking condition.



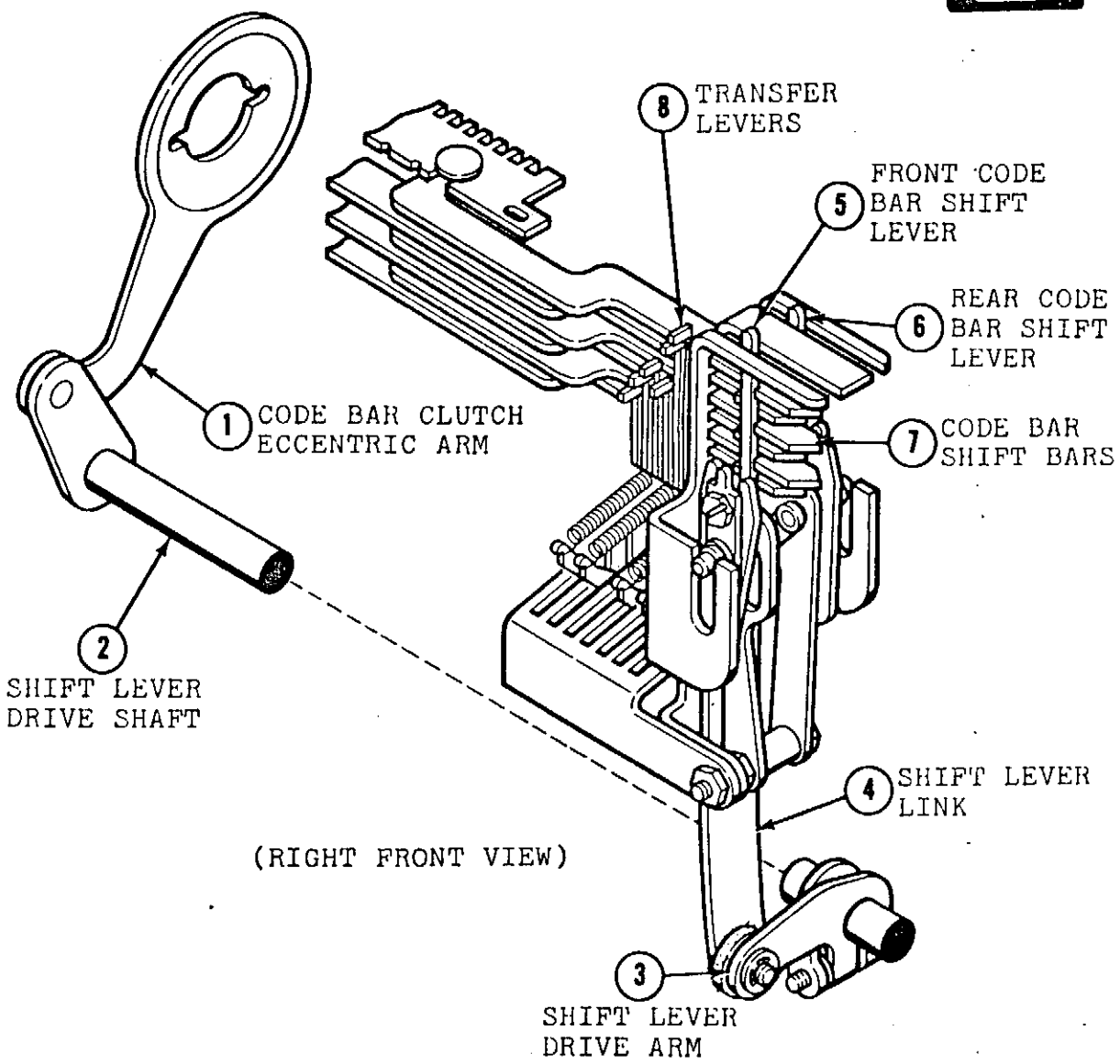
Spacing Condition:

When a SELECTOR LEVER (1) remains unoperated, PUSH LEVER (2) will be unoperated and remain in a spacing condition. Because of spring arrangement, TRANSFER LEVER (3) will be forced toward front of unit. CODE BAR SHIFT BAR (4) will be forced toward front of unit.

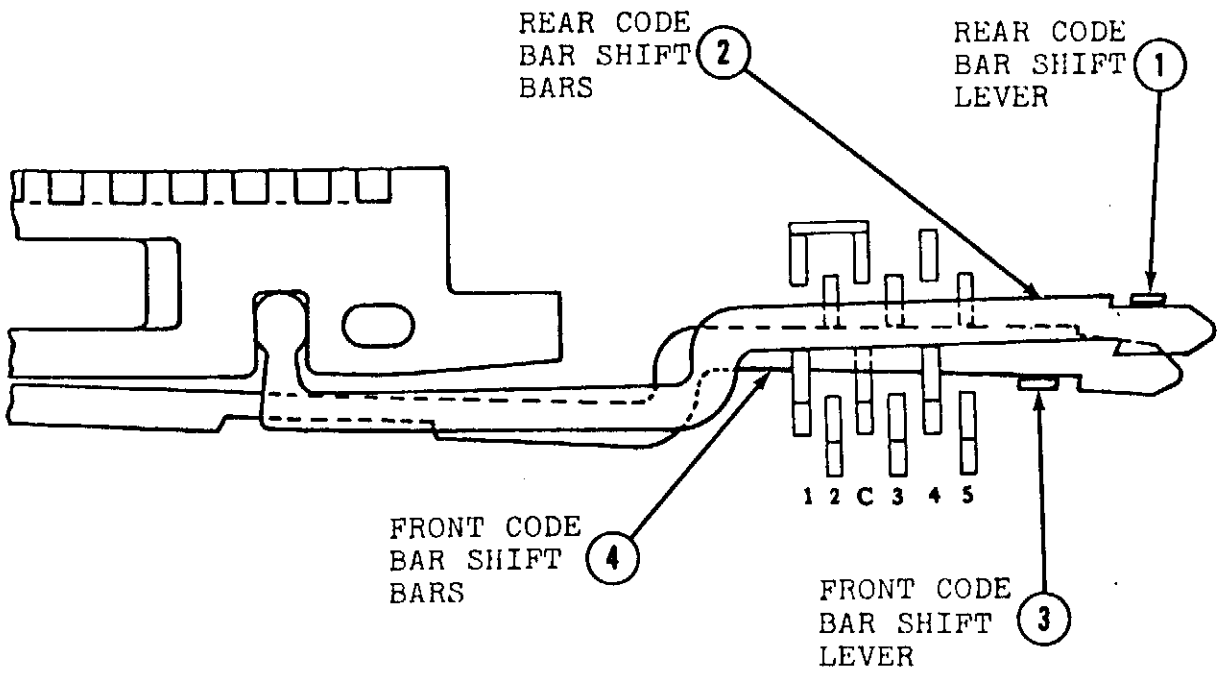


(RIGHT SIDE VIEW)

When Selector Cam Assembly rotates, CODE BAR CLUTCH TRIP CAM (1) moves CODE BAR CLUTCH TRIP SHAFT LEVER (2). CODE BAR CLUTCH TRIP SHAFT LEVER (2) pivots CODE BAR CLUTCH TRIP SHAFT (3). When CODE BAR CLUTCH TRIP SHAFT (3) is rotated it releases CODE BAR CLUTCH (4). After tripping CODE BAR CLUTCH (4), CODE BAR CLUTCH TRIP SHAFT LEVER (2) follows its cam surface to low part positioning CODE BAR CLUTCH TRIP LEVER (5) to disengage CODE BAR CLUTCH (4).

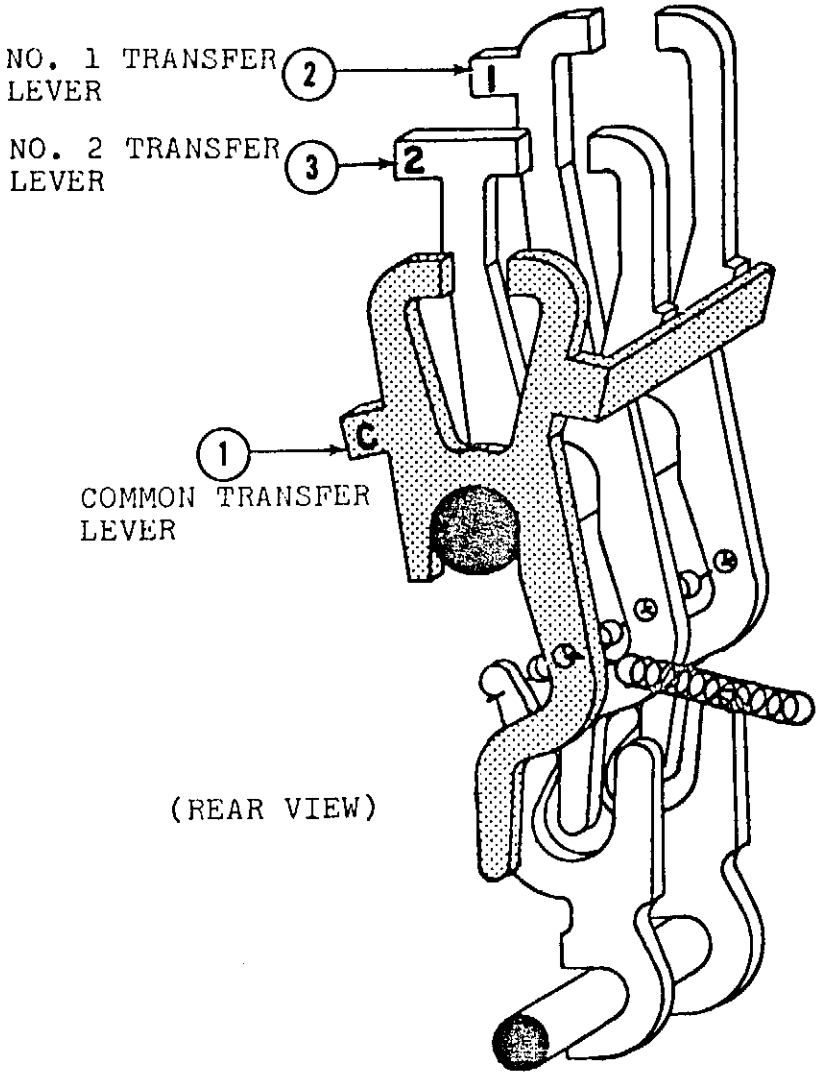


Rotation of Code Bar Clutch and CODE BAR CLUTCH ECCENTRIC ARM (1) will rotate SHIFT LEVER DRIVE SHAFT (2) pivoting SHIFT LEVER DRIVE ARM (3). Pivoting of SHIFT LEVER DRIVE ARM (3) moves SHIFT LEVER LINK (4) up and down. On movement upward of SHIFT LEVER LINK (4), FRONT CODE BAR SHIFT LEVER (5) moves right and REAR CODE BAR SHIFT LEVER (6) moves left causing CODE BAR SHIFT BARS (7) to shift left or right according to position set up upon them by TRANSFER LEVERS (8).

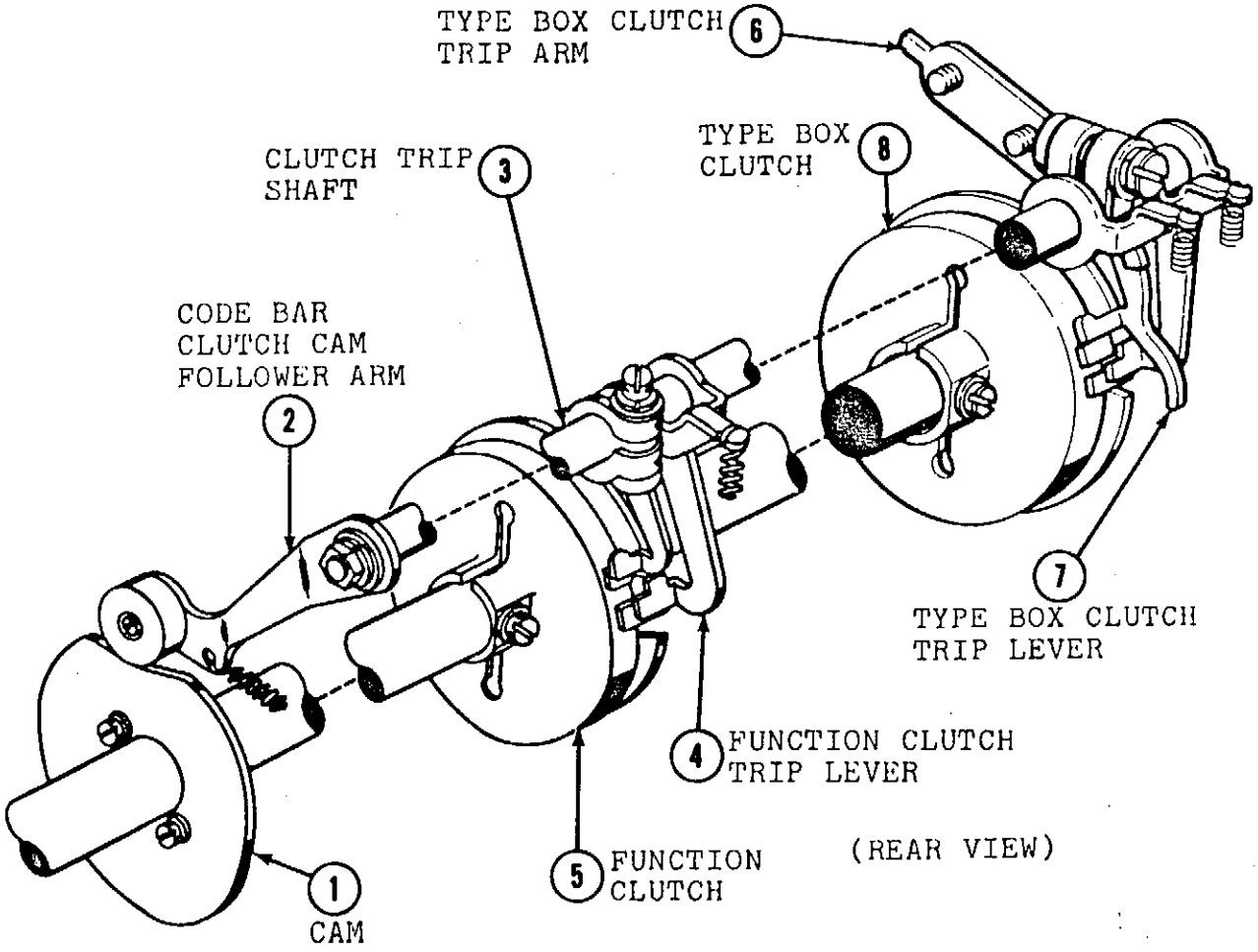


(TOP VIEW)

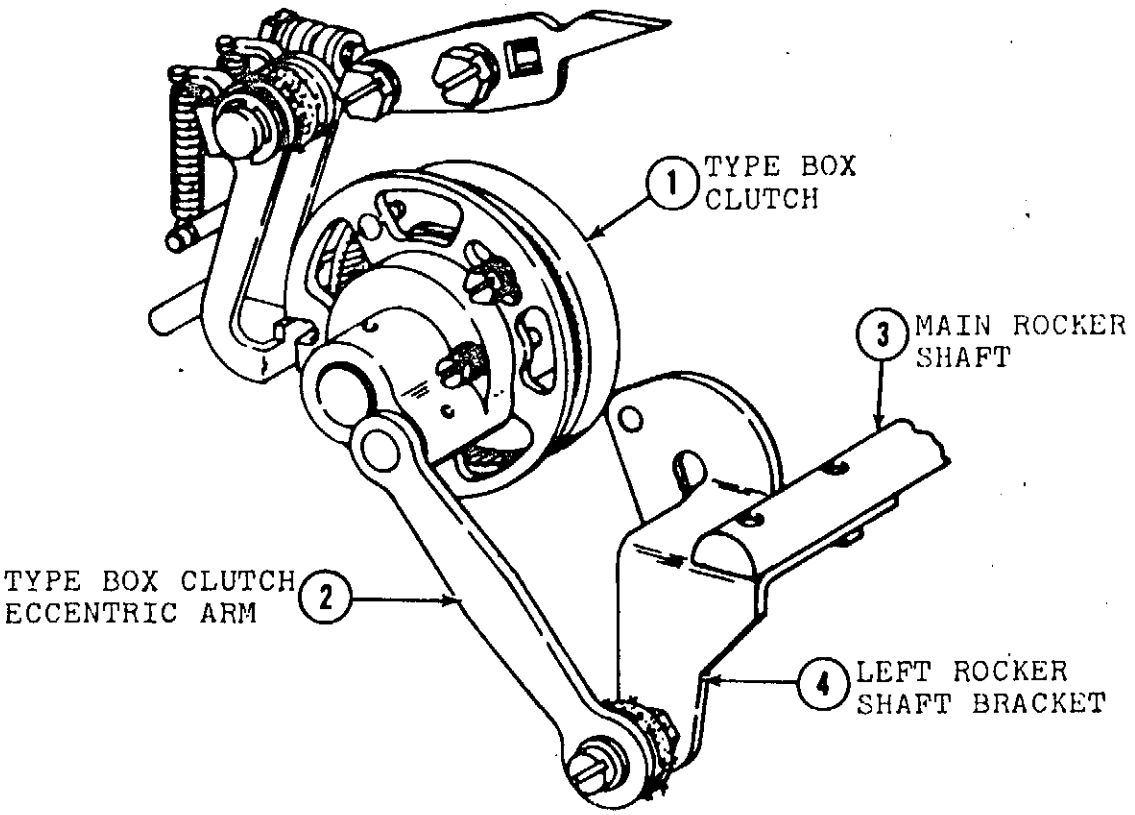
REAR CODE BAR SHIFT LEVER (1) shifts REAR CODE BAR SHIFT BARS (2) to left marking and FRONT CODE BAR SHIFT LEVER (3) moves FRONT CODE BAR SHIFT BARS (4) to right spacing.



To obtain four units of vertical travel for positioning of type box, it is necessary to add a code bar called a Common Code Bar. Common Code Bar is operated by COMMON TRANSFER LEVER (1), which is operated by either NO. 1 TRANSFER LEVER (2) or NO. 2 TRANSFER LEVER (3). COMMON TRANSFER LEVER (1) does not have a Push Lever or Selector Lever. COMMON TRANSFER LEVER (1) is spring loaded in a spacing condition. It has an extension toward rear of unit that will be operated by movement of NO. 1 TRANSFER LEVER (2) and/or NO. 2 TRANSFER LEVER (3).

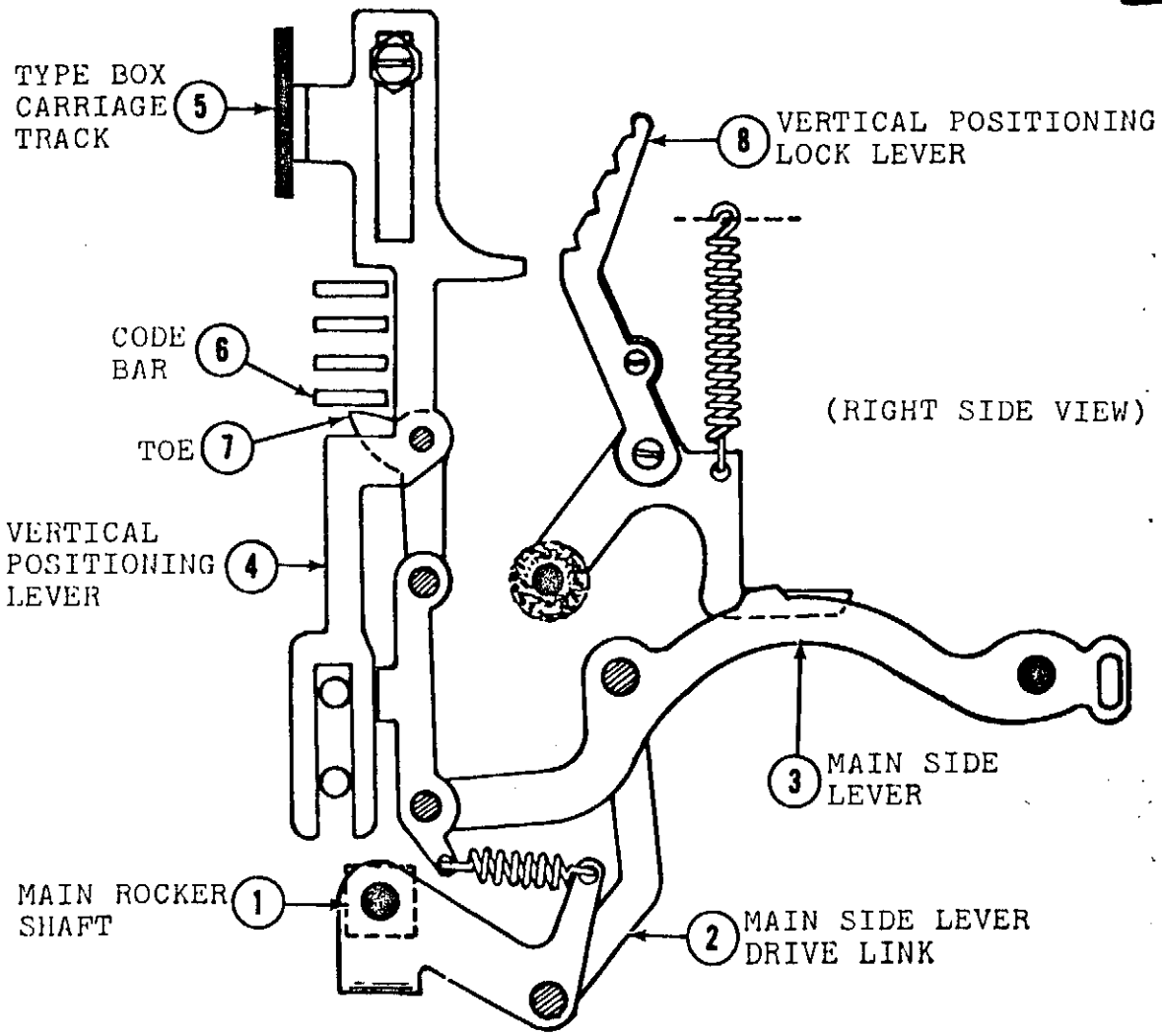


As Code Bar Clutch and CAM (1) rotate, CODE BAR CLUTCH CAM FOLLOWER ARM (2) which is attached to CLUTCH TRIP SHAFT (3), rides into cam indent causing CLUTCH TRIP SHAFT (3) to pivot moving FUNCTION CLUTCH TRIP LEVER (4) and engaging FUNCTION CLUTCH (5). TYPE BOX CLUTCH TRIP ARM (6) is also attached to TRIP SHAFT (3). As CLUTCH TRIP SHAFT (3) pivots, TYPE BOX CLUTCH TRIP ARM (6) moves TYPE BOX CLUTCH TRIP LEVER (7) engaging TYPE BOX CLUTCH (8).

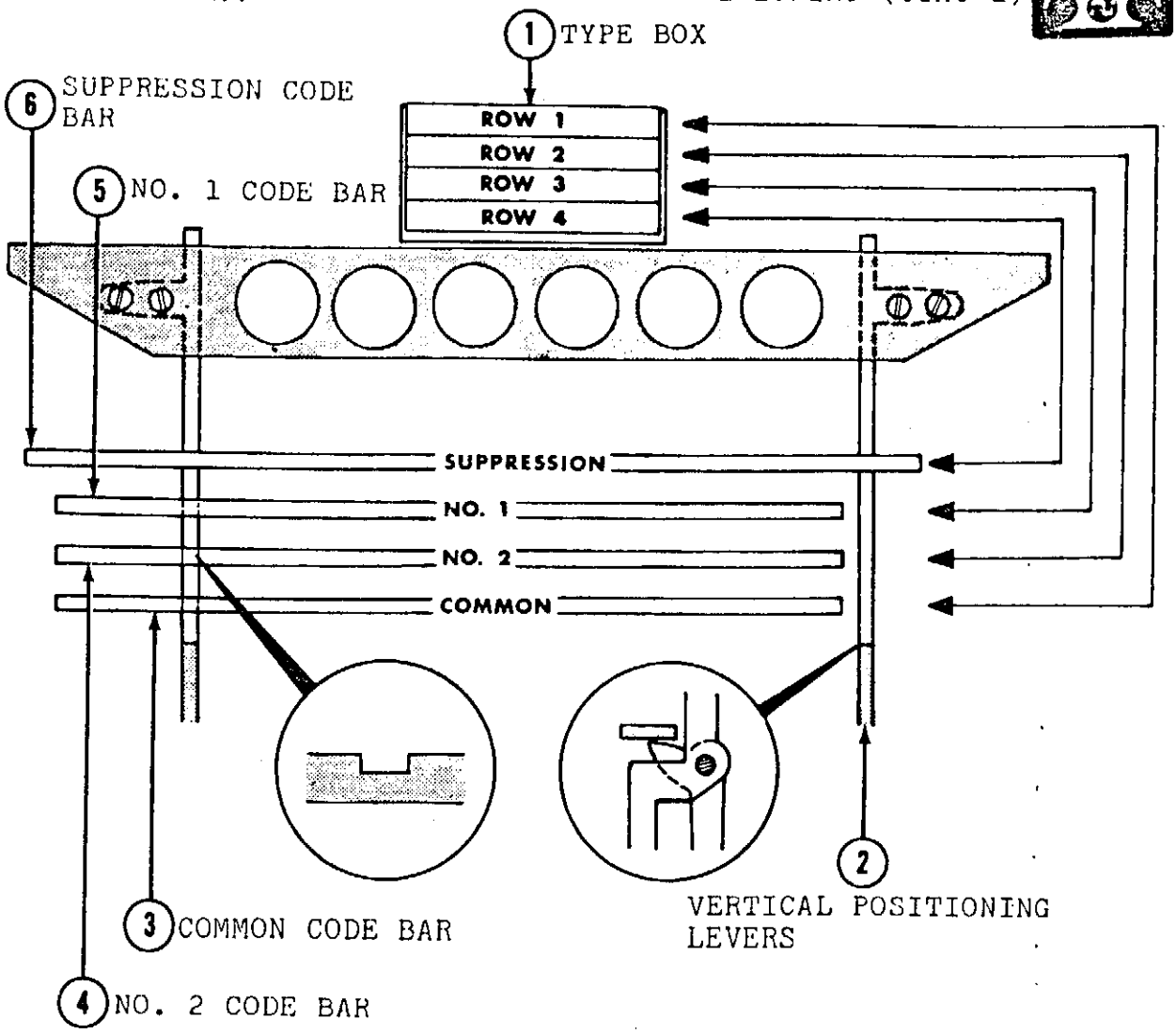


(LEFT SIDE VIEW)

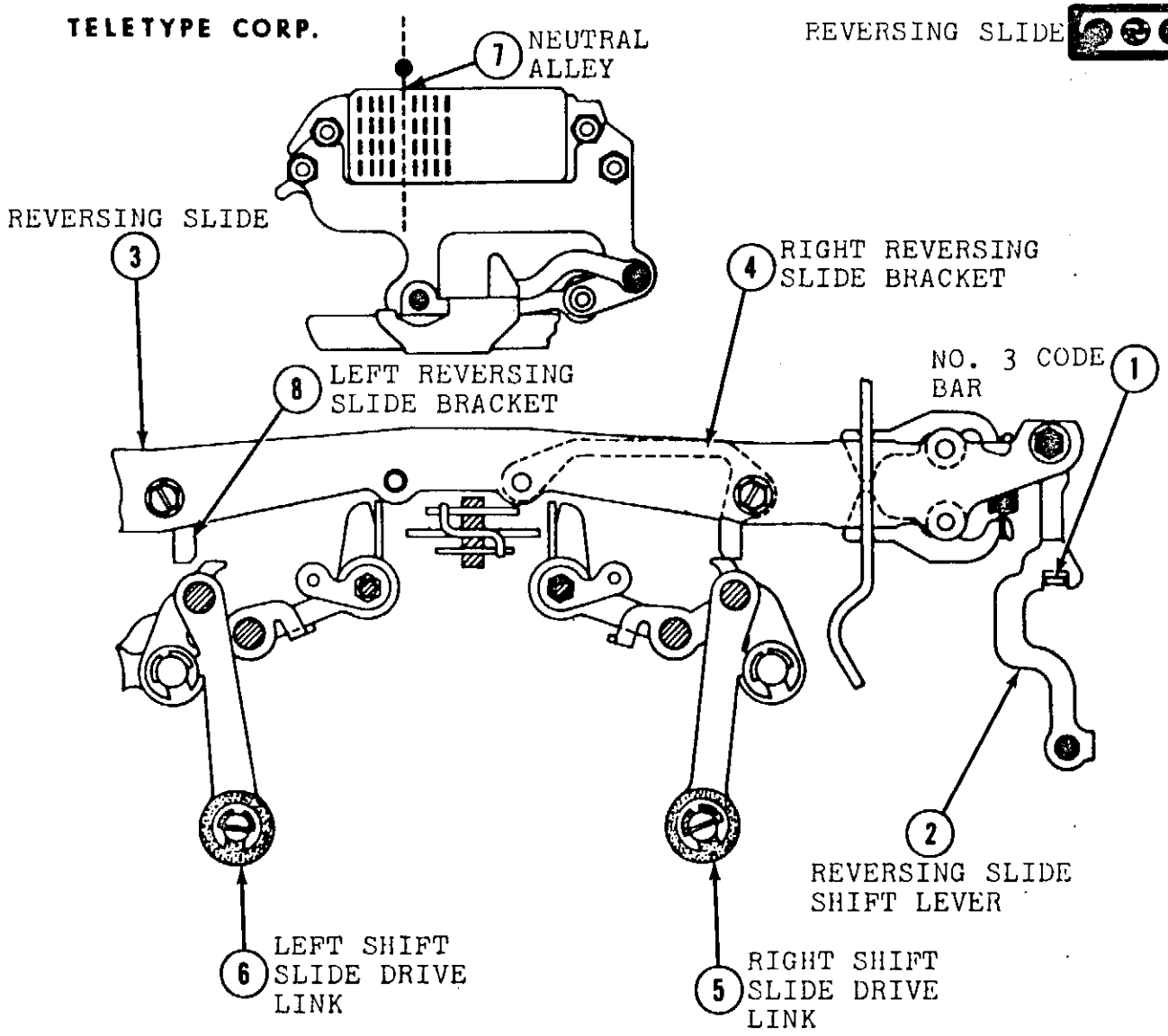
When TYPE BOX CLUTCH (1) is tripped, power which is transmitted through TYPE BOX CLUTCH ECCENTRIC ARM (2), operates MAIN ROCKER SHAFT (3). TYPE BOX CLUTCH ECCENTRIC ARM (2) rotates LEFT ROCKER SHAFT BRACKET (4) which in turn causes MAIN ROCKER SHAFT (3) to pivot.



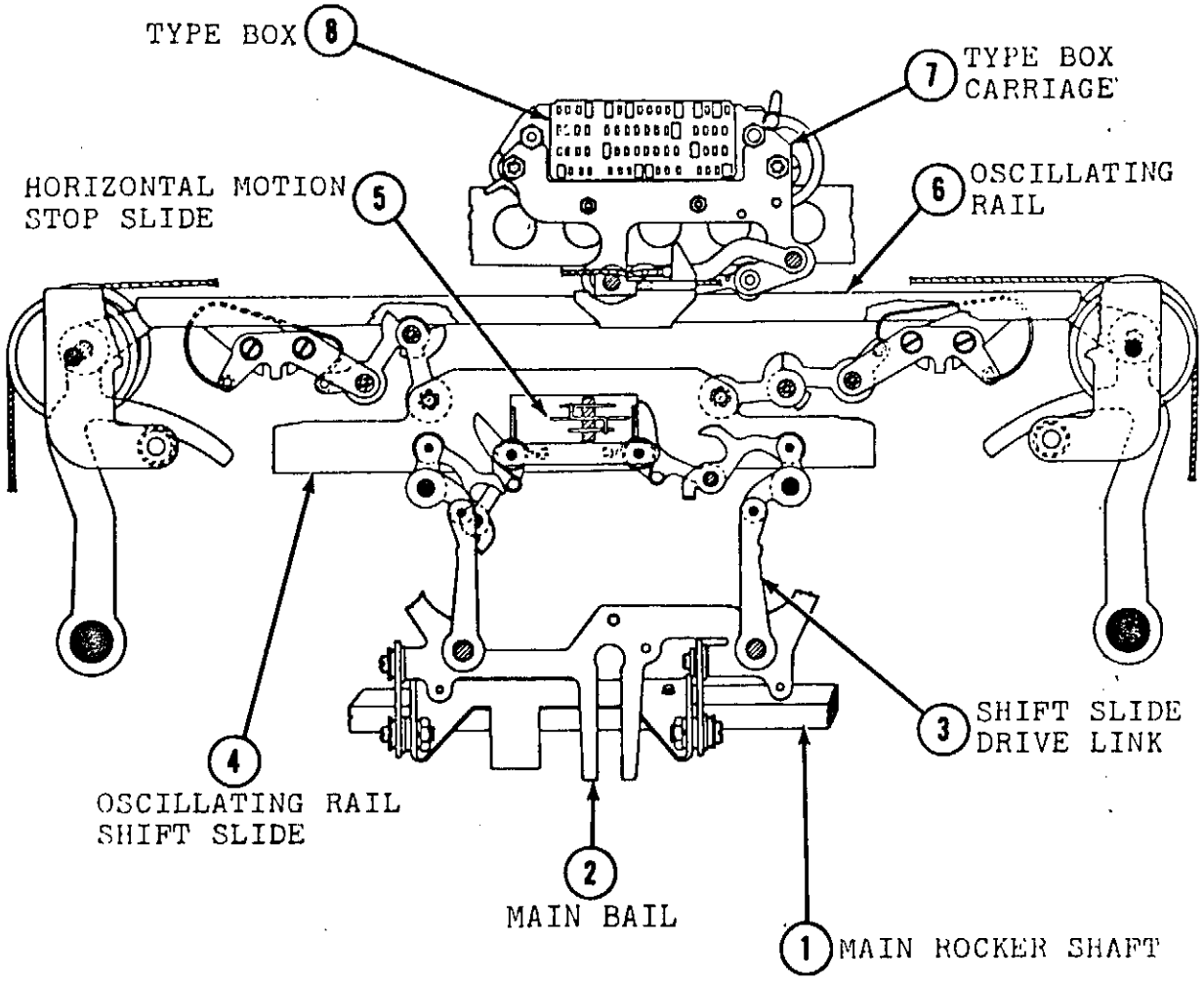
As MAIN ROCKER SHAFT (1) pivots, MAIN SIDE LEVER DRIVE LINK (2) and MAIN SIDE LEVER (3) move VERTICAL POSITIONING LEVER (4) and TYPE BOX CARRIAGE TRACK (5) upward until VERTICAL POSITIONING LEVER (4) is blocked by a projecting CODE BAR (6) in a spacing (right) condition. When VERTICAL POSITIONING LEVER (4) is blocked by a projecting CODE BAR (6), TOE (7) of VERTICAL POSITIONING LEVER (4) causes a buckling of knee link when contact is made. VERTICAL POSITIONING LOCK LEVER (8) is part of this linkage. It will be moved toward front of unit to present one of four possible steps to lock TYPE BOX CARRIAGE TRACK (5) in a selected position.



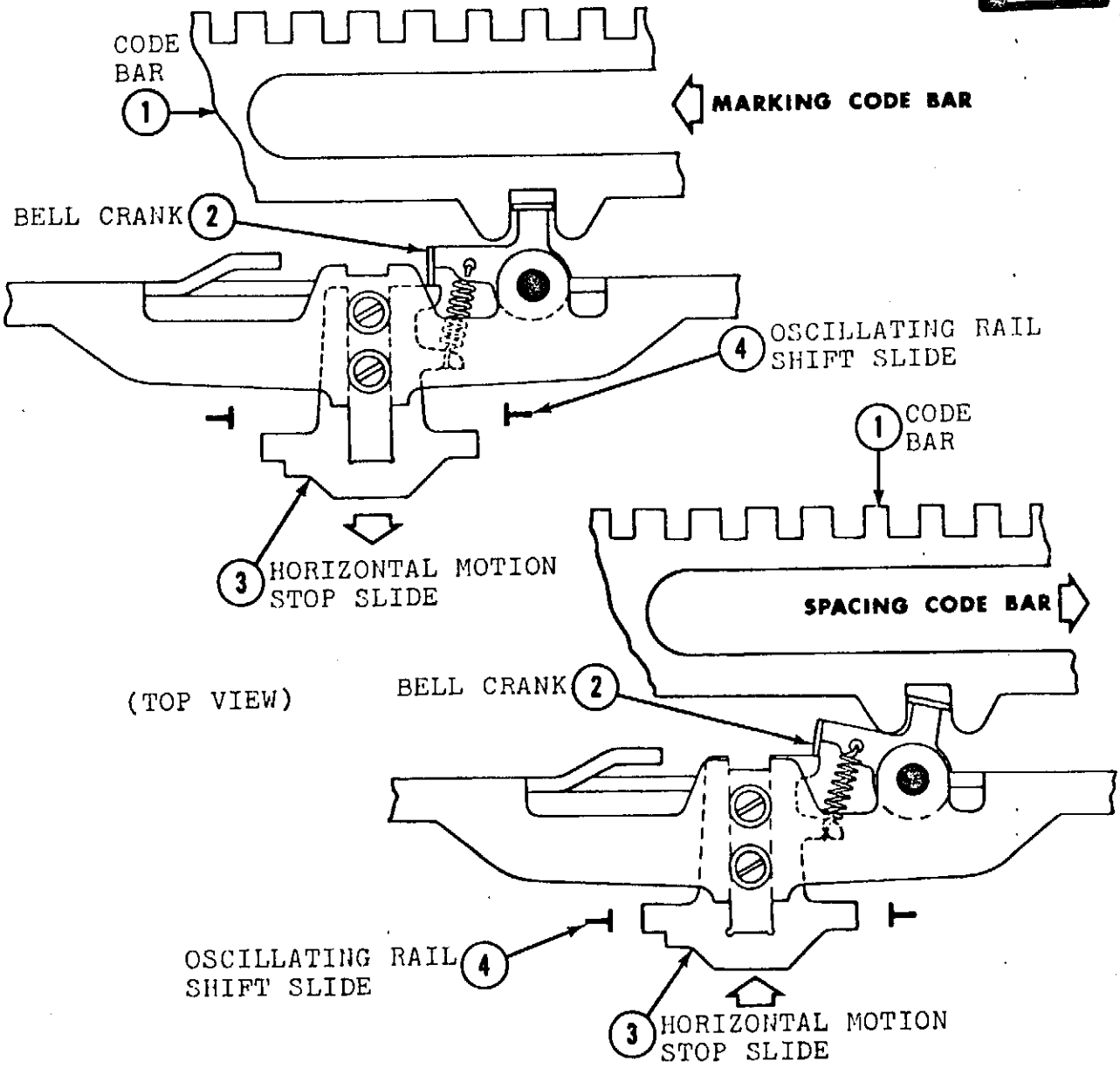
Vertical positioning of TYPE BOX (1) will give four horizontal rows on TYPE BOX (1). In vertical positioning of TYPE BOX (1) the following rule applies: Spacing Blocks. Four code bars will permit printer to select four different units of vertical travel. If VERTICAL POSITIONING LEVERS (2) are blocked by extensions on COMMON CODE BAR (3) this will give one unit of travel; NO. 2 CODE BAR (4) - two units of travel; NO. 1 CODE BAR (5) - three units of travel; and SUPPRESSION CODE BAR (6) - four units of travel.



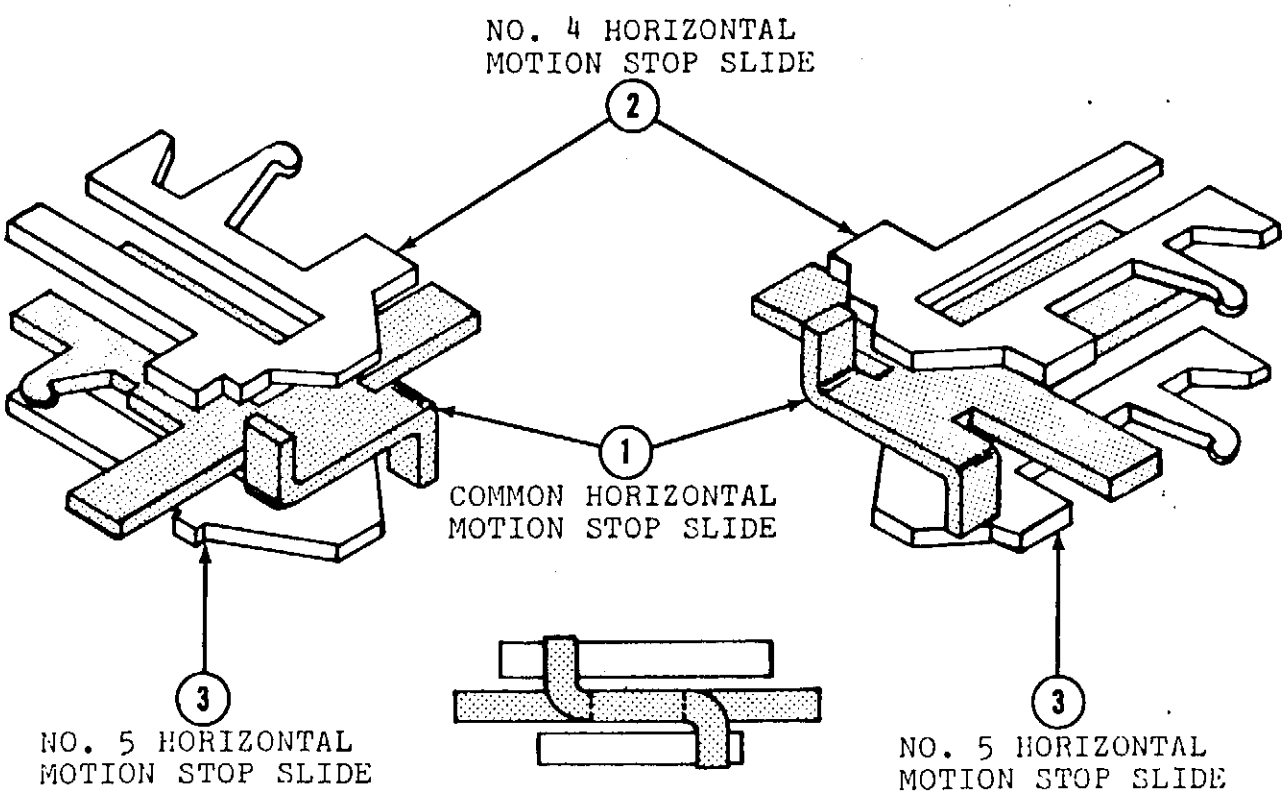
NO. 3 CODE BAR (1) positions REVERSING SLIDE SHIFT LEVER (2) and REVERSING SLIDE (3) to left marking or to right spacing. As REVERSING SLIDE (3) moves to left, RIGHT REVERSING SLIDE BRACKET (4) buckles RIGHT SHIFT SLIDE DRIVE LINK (5). Driving takes place from LEFT SHIFT SLIDE DRIVE LINK (6). Printing takes place on left side of NEUTRAL ALLEY (7). As REVERSING SLIDE (3) moves to right, LEFT REVERSING SLIDE BRACKET (8) buckles LEFT SHIFT SLIDE DRIVE LINK (6). Driving takes place from RIGHT SHIFT SLIDE DRIVE LINK (5). Printing takes place on right side of NEUTRAL ALLEY (7).



As MAIN ROCKER SHAFT (1) pulls MAIN BAIL (2) down, SHIFT SLIDE DRIVE LINK (3) that is not buckled drives OSCILLATING RAIL SHIFT SLIDE (4) against longest HORIZONTAL MOTION STOP SLIDE (5) in its path. OSCILLATING RAIL SHIFT SLIDE (4) positions OSCILLATING RAIL (6) and TYPE BOX CARRIAGE (7) and positions selected row of TYPE BOX (8) under hammer.



If No. 4 or No. 5 CODE BAR (1) moves left marking, it pivots its individual BELL CRANK (2) counterclockwise pushing its HORIZONTAL MOTION STOP SLIDE (3) out of path of OSCILLATING RAIL SHIFT SLIDE (4) . If No. 4 or No. 5 CODE BAR (1) moves right spacing, its individual BELL CRANK (2) pivots clockwise pulling its HORIZONTAL MOTION STOP SLIDE (3) in path of OSCILLATING RAIL SHIFT SLIDE (4) .



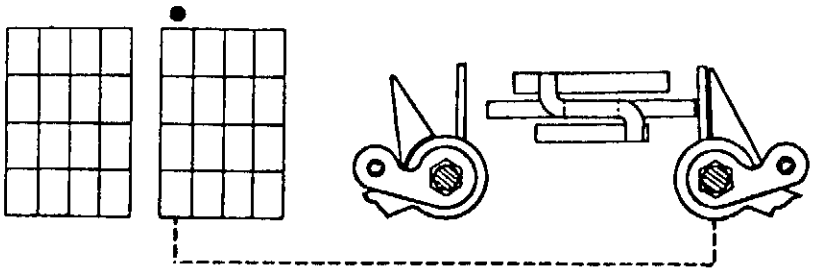
COMMON HORIZONTAL MOTION STOP SLIDE (1) is spring loaded spacing (rear of unit). COMMON HORIZONTAL MOTION STOP SLIDE (1) extensions extend into path of NO. 4 HORIZONTAL MOTION STOP SLIDE (2) and NO. 5 HORIZONTAL MOTION STOP SLIDE (3). Rules for operation of COMMON HORIZONTAL MOTION STOP SLIDE (1) are as follows:

NO. 4 MARKS COMMON MARKS

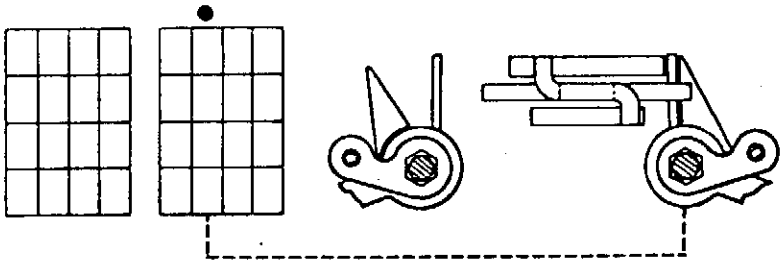
NO. 5 MARKS COMMON MARKS

NO. 4 & 5 MARKS COMMON MARKS

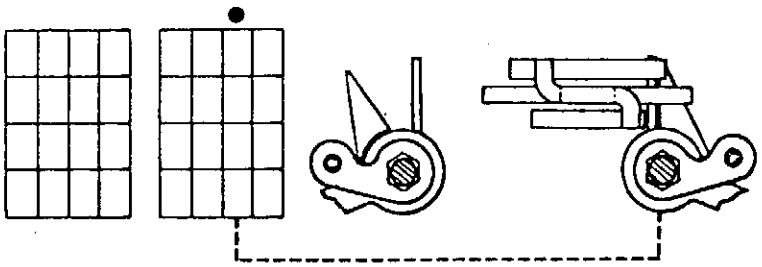
NO. 4 & 5 SPACE COMMON SPACES



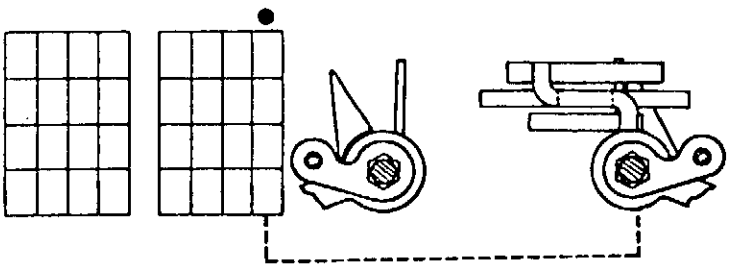
No. 3 Code Bar SPACING
No. 4 Code Bar SPACING
No. 5 Code Bar SPACING



No. 3 Code Bar SPACING
No. 4 Code Bar SPACING
No. 5 Code Bar MARKING

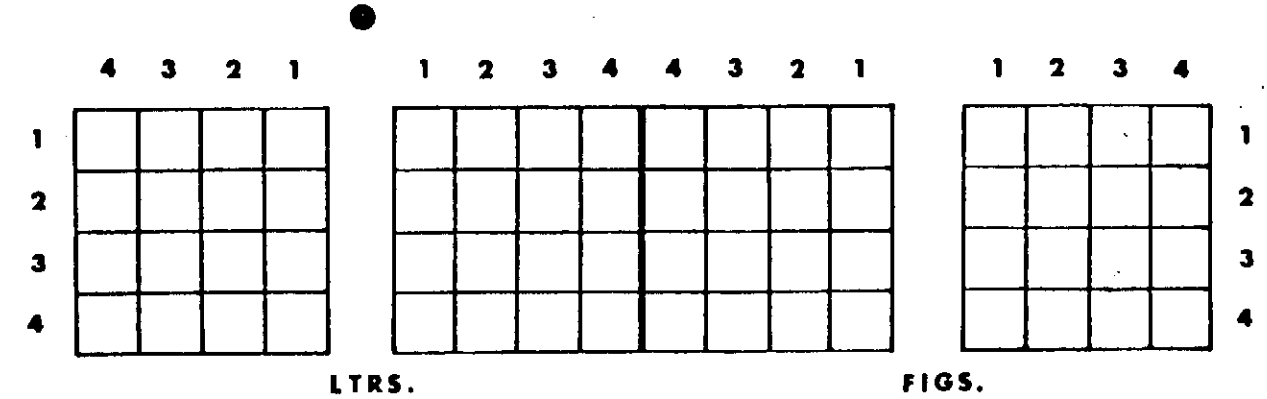


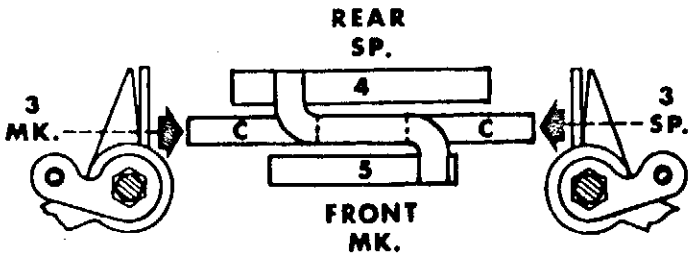
No. 3 Code Bar SPACING
No. 4 Code Bar MARKING
No. 5 Code Bar SPACING



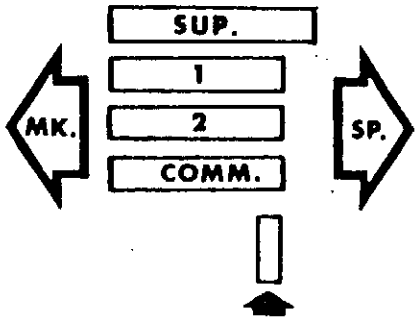
No. 3 Code Bar SPACING
No. 4 Code Bar MARKING
No. 5 Code Bar MARKING

MODEL 28 TYPEBOX

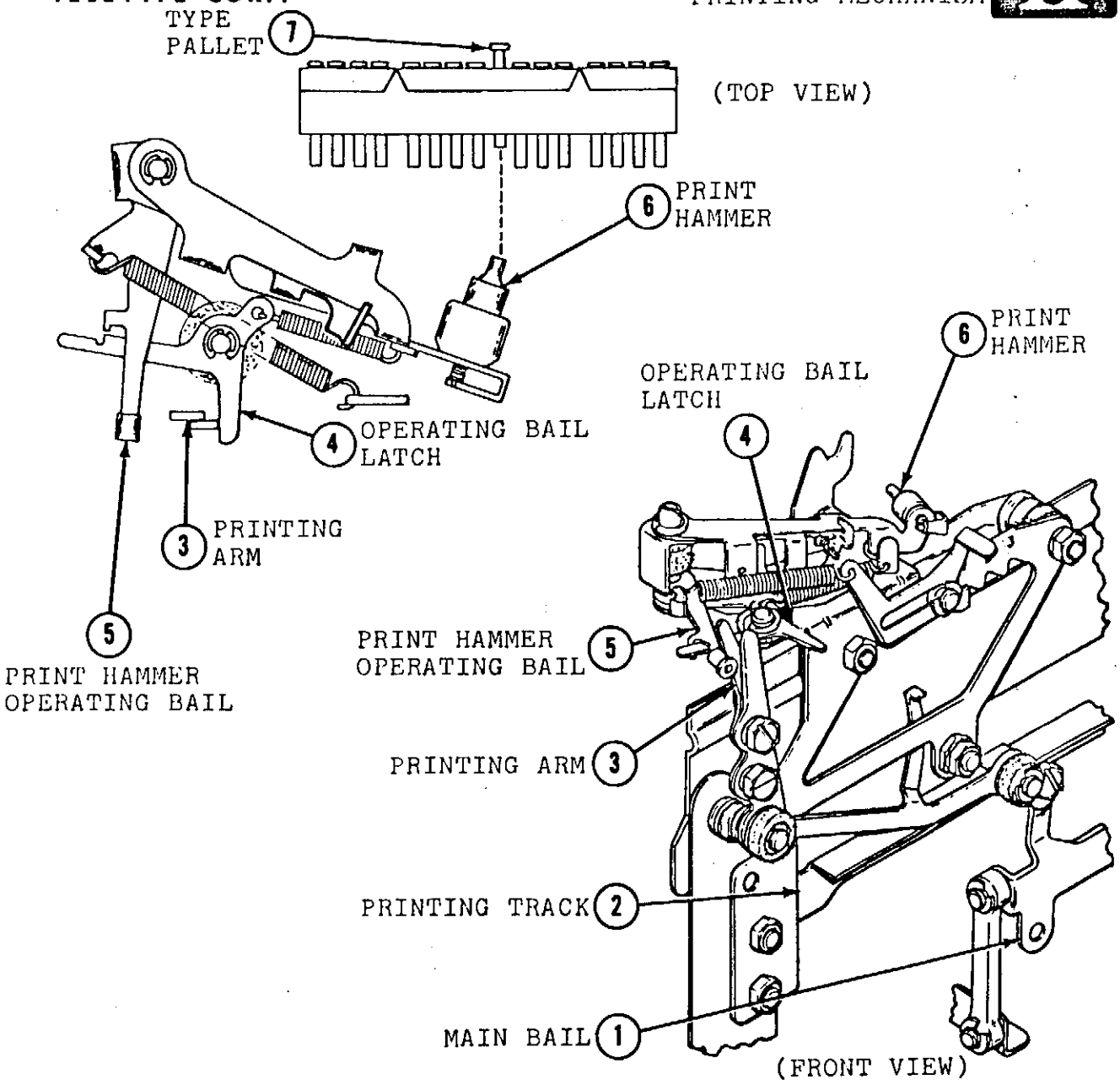




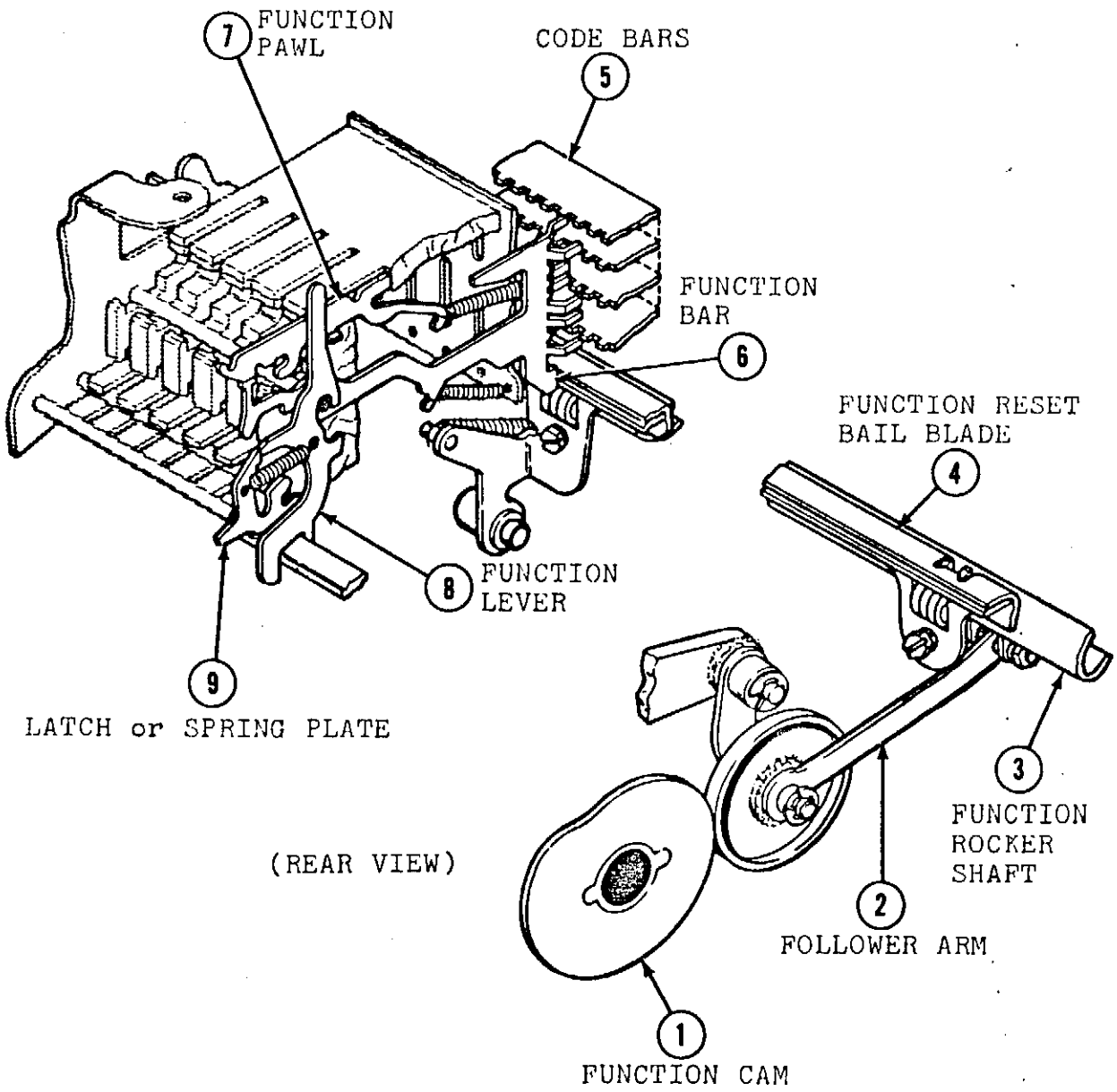
HORIZONTAL POSITIONING
RULE:
IF NO. 4 MARKS COMMON MARKS
IF NO. 5 MARKS COMMON MARKS
IF NO. 4 & 5 MARKS COMMON MARKS
IF NO. 4 & 5 SPACES COMMON SPACES



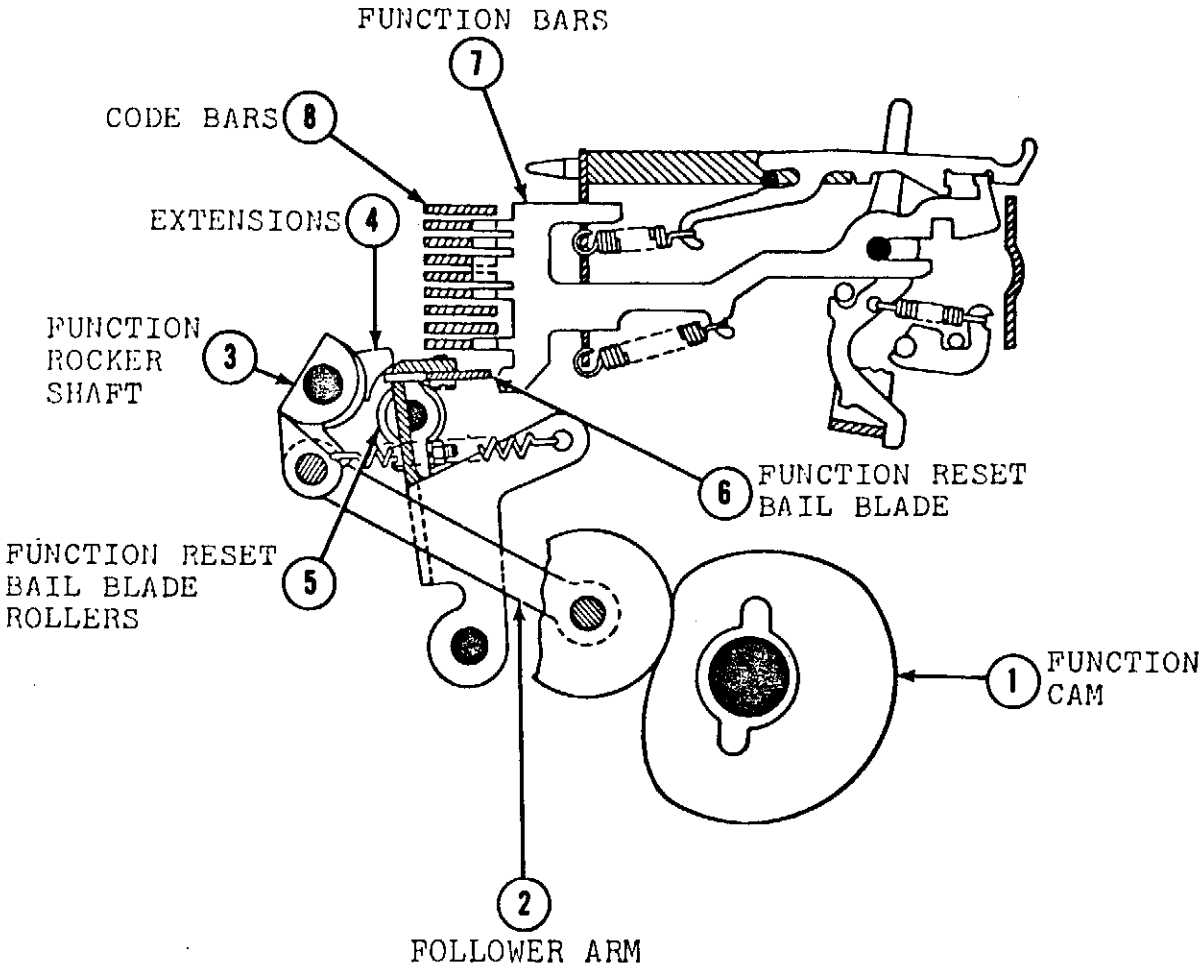
VERTICAL POSITIONING
RULE:
IF NO. 1 MARKS COMMON MARKS
IF NO. 2 MARKS COMMON MARKS
IF NO. 1 & 2 MARKS COMMON MARKS
IF NO. 1 & 2 SPACES COMMON SPACES



During first 180 degrees of Type Box Clutch rotation, vertical and horizontal positioning takes place. Printing occurs at 180 degrees of Type Box Clutch rotation. As MAIN BAIL (1) and PRINTING TRACK (2) move downward it causes PRINTING ARM (3) to move also. PRINTING ARM (3) moves OPERATING BAIL LATCH (4) releasing PRINT HAMMER OPERATING BAIL (5). PRINT HAMMER (6) strikes selected TYPE PALLET (7).

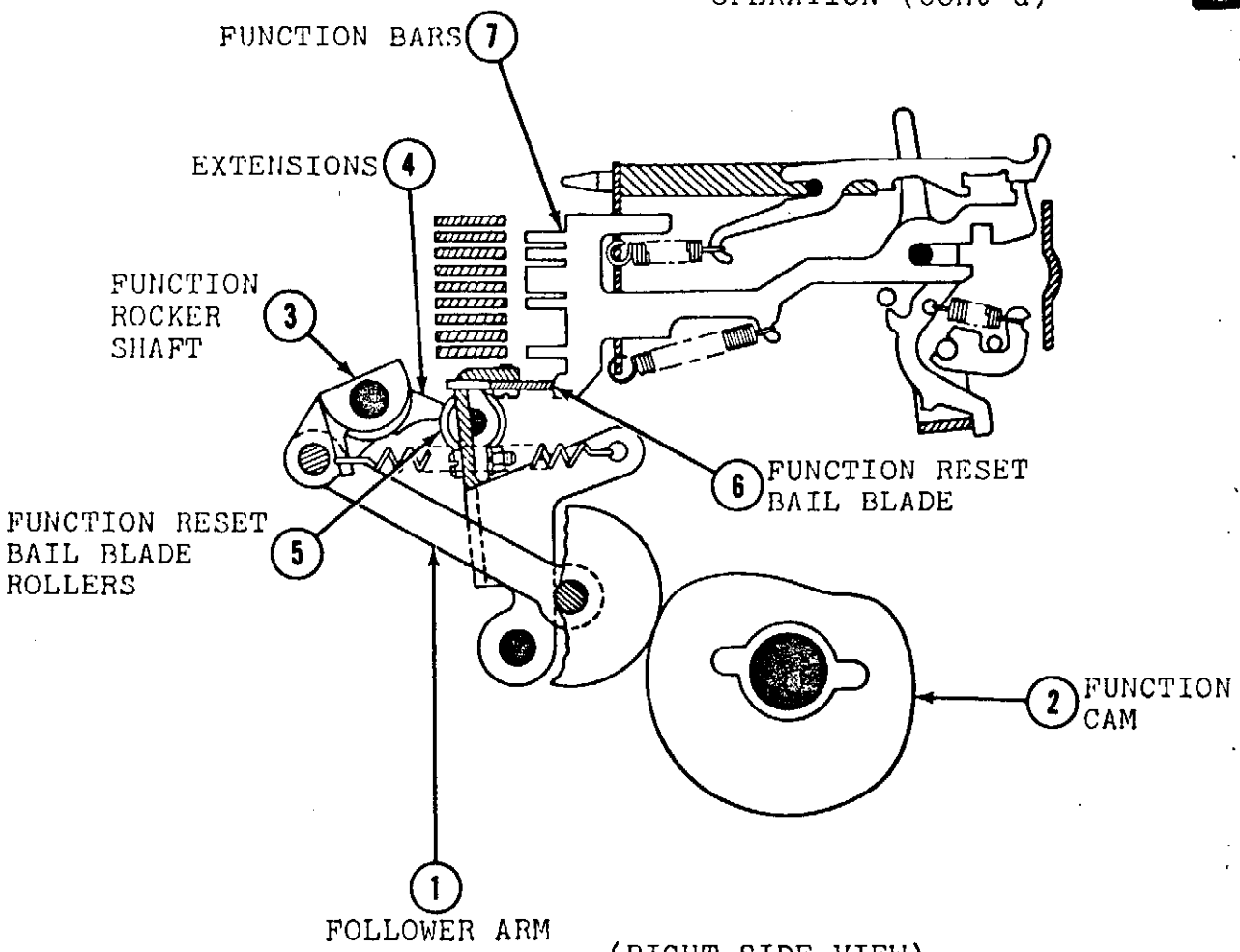


Basic components of Function Mechanism are FUNCTION CAM (1), FOLLOWER ARM (2), FUNCTION ROCKER SHAFT (3), FUNCTION RESET BAIL BLADE (4), CODE BARS (5), FUNCTION BAR (6), FUNCTION PAWL (7), FUNCTION LEVER (8), and LATCH or SPRING PLATE (9).



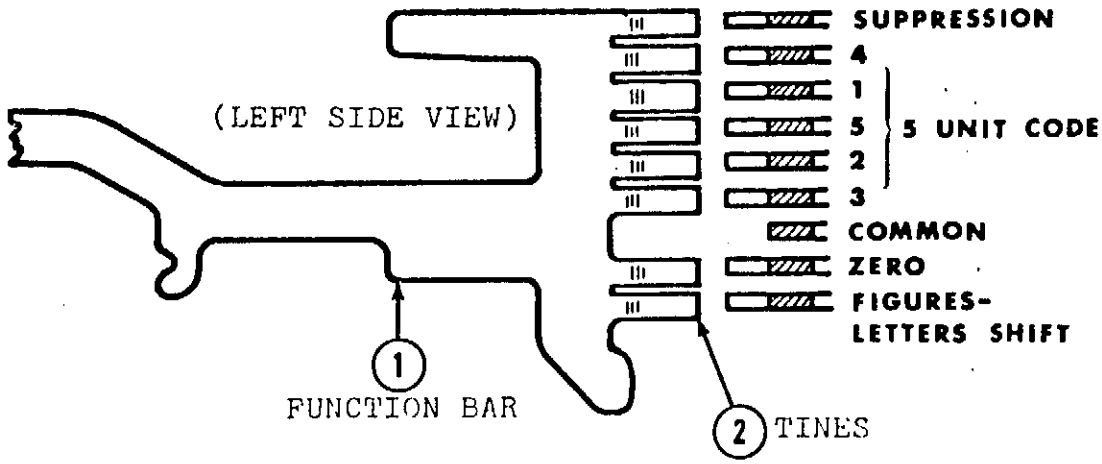
(RIGHT SIDE VIEW)

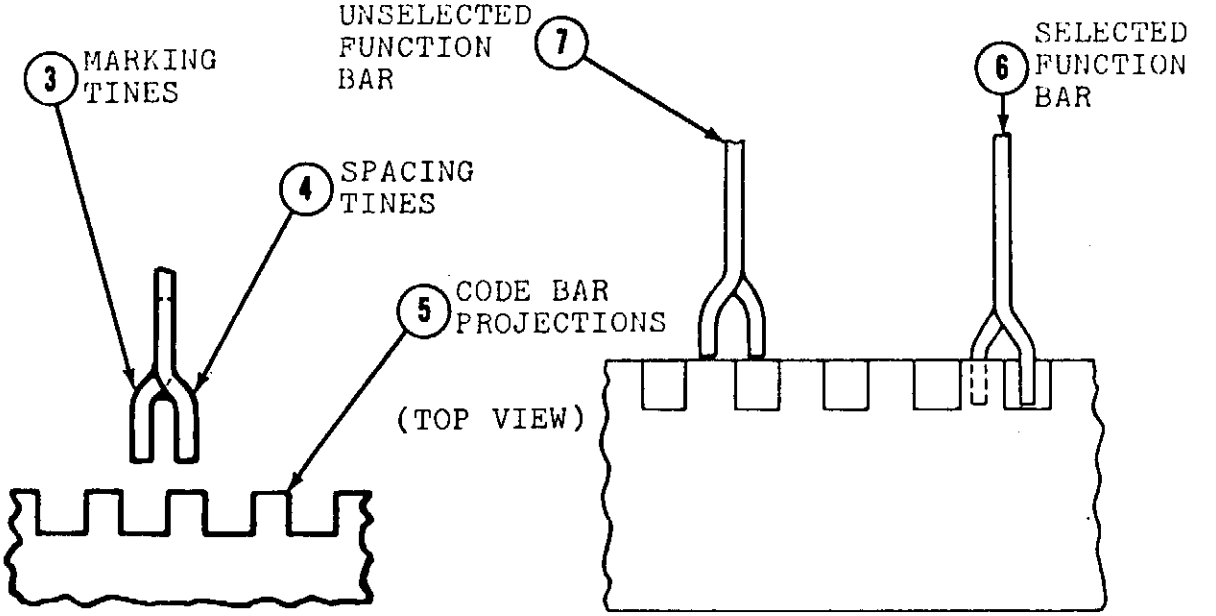
As Function Clutch with FUNCTION CAM (1) rotates, FOLLOWER ARM (2) moves to low part of FUNCTION CAM (1) pivoting FUNCTION ROCKER SHAFT (3) moving its EXTENSIONS (4) away from FUNCTION RESET BAIL BLADE ROLLERS (5). FUNCTION RESET BAIL BLADE (6) moves toward front releasing all FUNCTION BARS (7) to move toward CODE BARS (8).



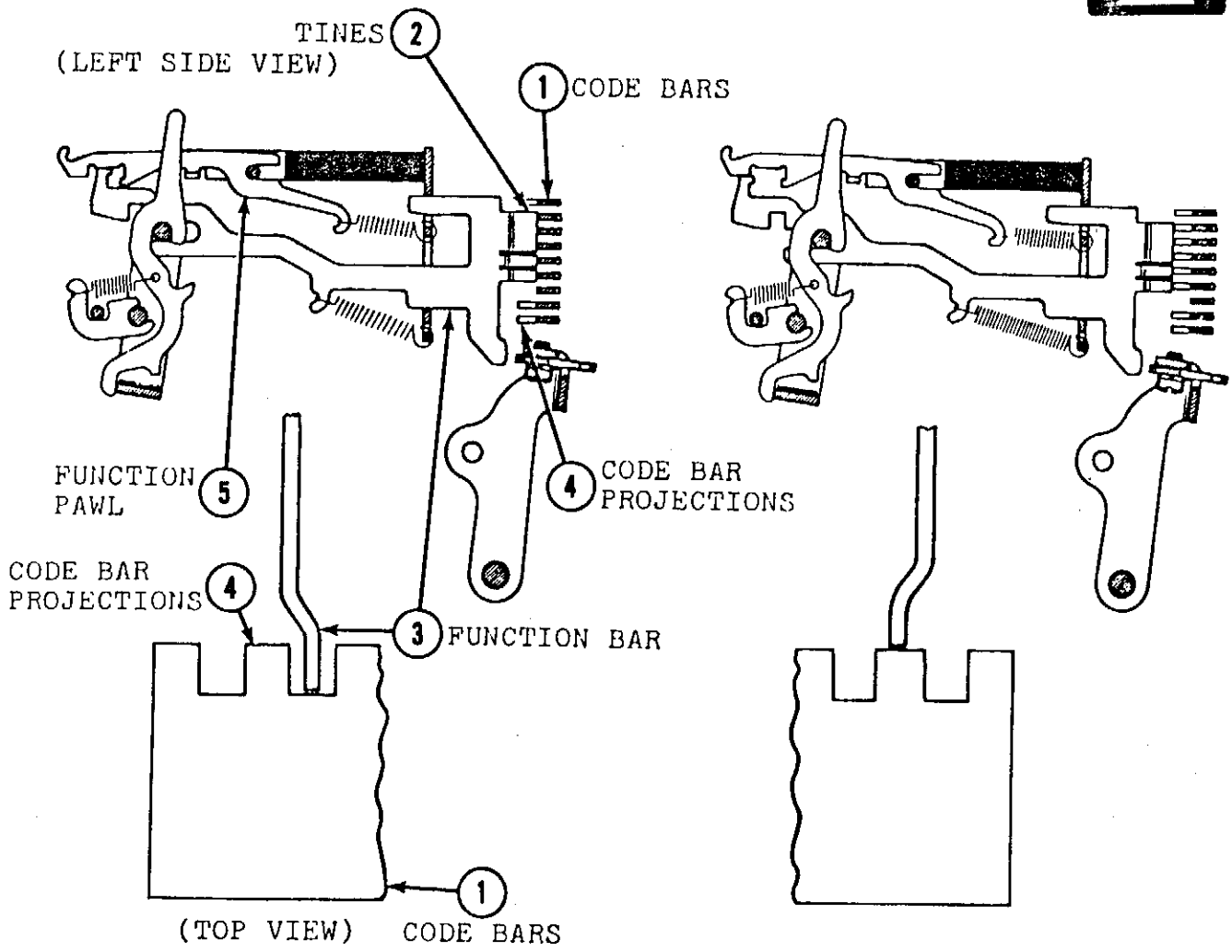
(RIGHT SIDE VIEW)

When FOLLOWER ARM (1) rides to high portion of FUNCTION CAM (2) it pivots FUNCTION ROCKER SHAFT (3), moving its EXTENSIONS (4) toward FUNCTION RESET BAIL BLADE ROLLERS (5) moving FUNCTION RESET BAIL BLADE (6) toward rear taking all FUNCTION BARS (7) with it.



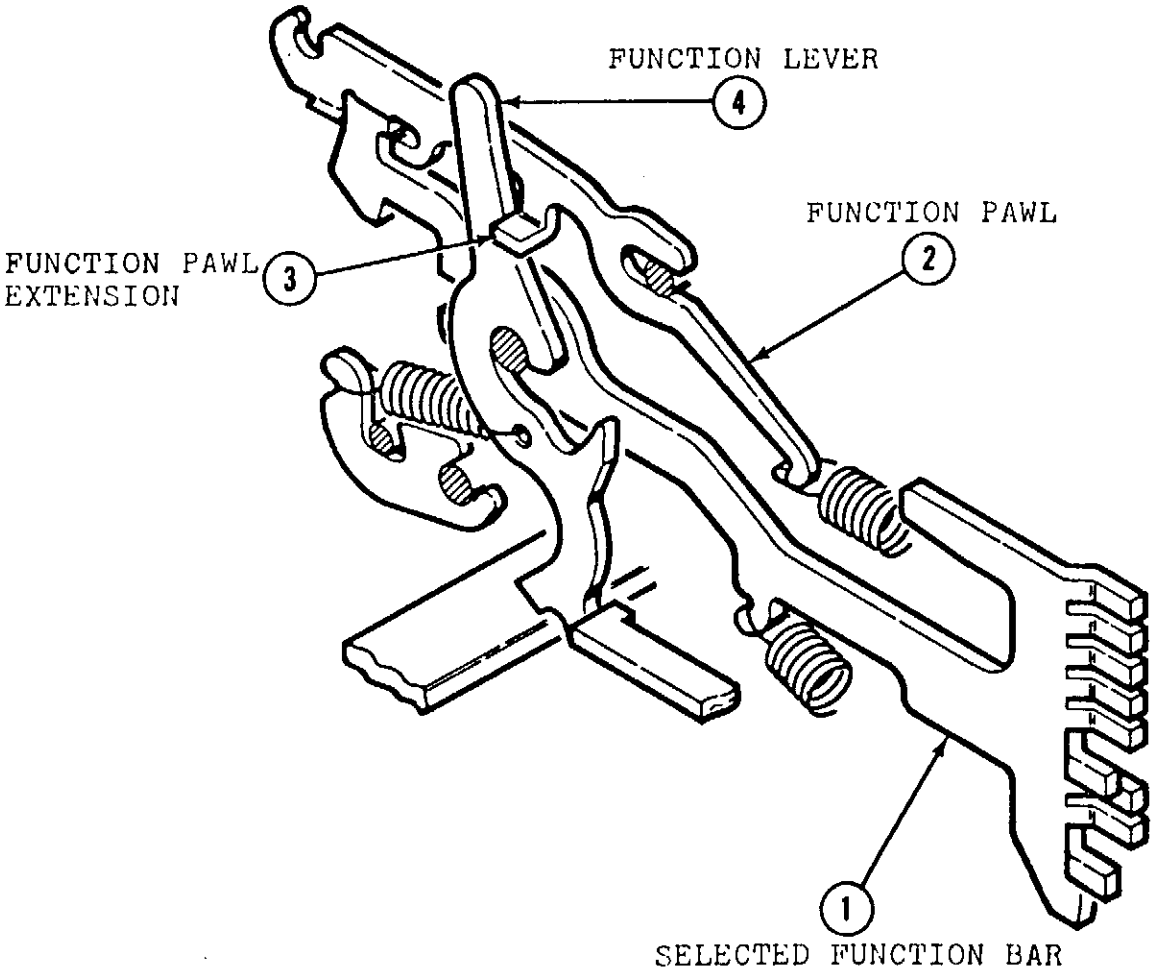


Projections at front of FUNCTION BAR (1) are called TINES (2). FUNCTION BAR (1) viewed from front will show TINES (2) angled to left and to right. TINES (2) angled to left are called MARKING TINES (3), those to right are called SPACING TINES (4). Motion of FUNCTION BAR (1) is forward and then to rear. If CODE BAR PROJECTIONS (5) do not block TINES (2) of FUNCTION BAR (1), it will move completely forward and becomes a SELECTED FUNCTION BAR (6). If CODE BAR PROJECTIONS (5) block TINES (2) of FUNCTION BAR (1), movement is stopped and it becomes an UNSELECTED FUNCTION BAR (7).

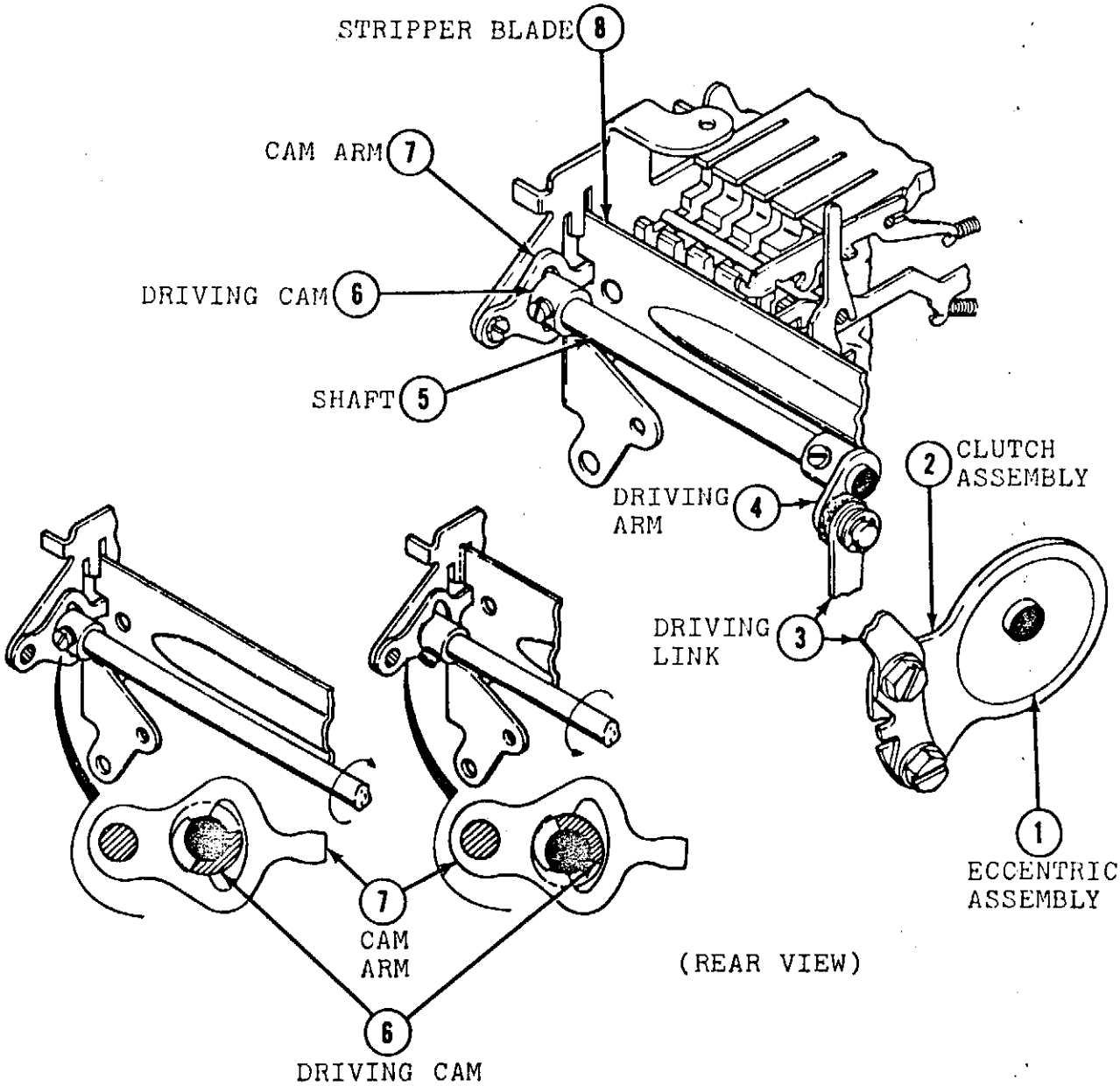


SELECTED FUNCTION BAR **UNSELECTED FUNCTION BAR**

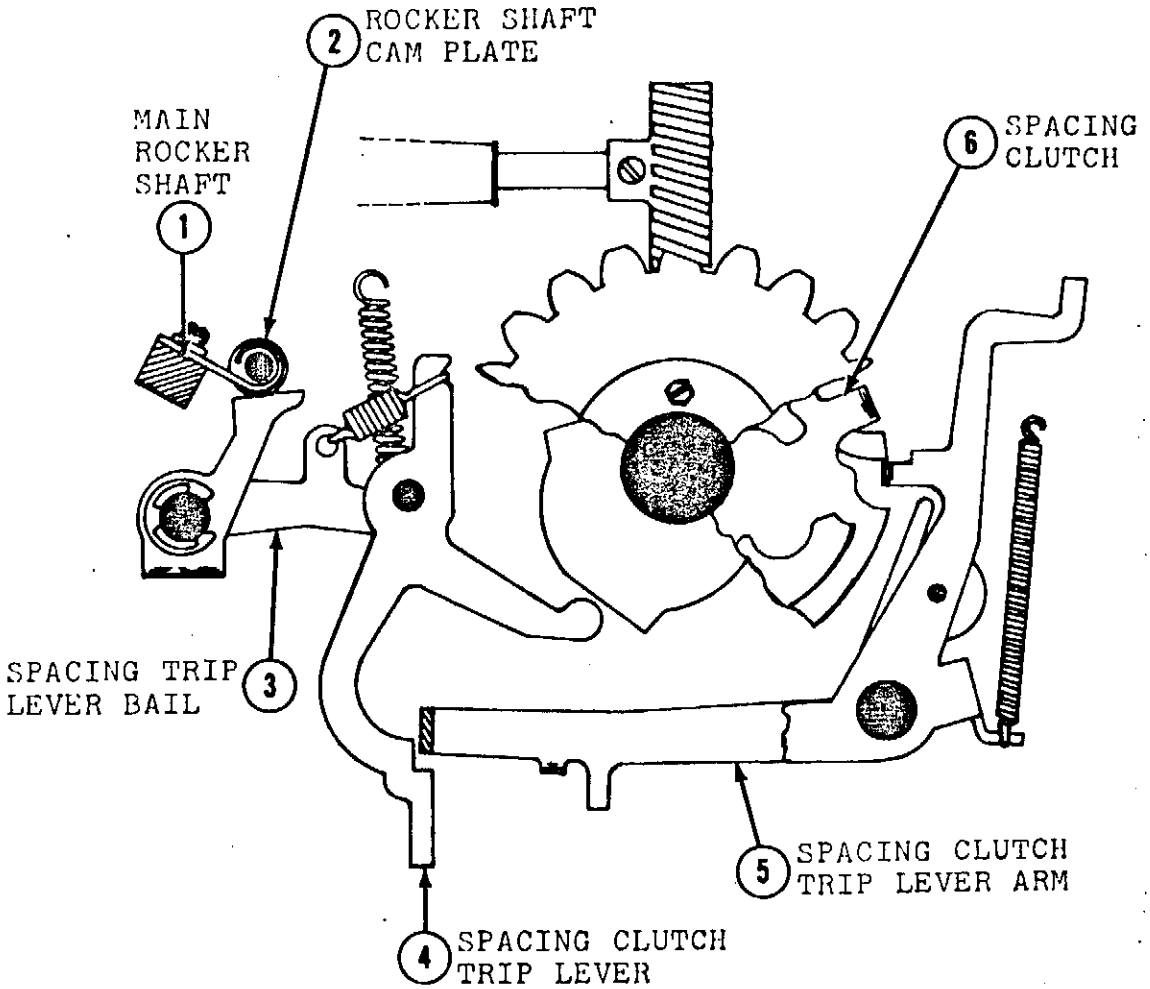
If code combination in typing unit CODE BARS (1) is such that TINES (2) of FUNCTION BAR (3) are not blocked by CODE BAR PROJECTIONS (4), then FUNCTION BAR (3) will move far enough forward to let FUNCTION PAWL (5) fall into engagement. If TINES (2) of FUNCTION BAR (3) are blocked by CODE BAR PROJECTIONS (4), then FUNCTION BAR (3) will not move far enough forward to let FUNCTION PAWL (5) fall into engagement.



As SELECTED FUNCTION BAR (1) is returned to rear by backward movement of Function Reset Bail Blade, FUNCTION PAWL (2) is carried to rear. FUNCTION PAWL EXTENSION (3) engages FUNCTION LEVER (4) which pivots with its top moving toward rear and bottom moving toward front of unit. It is this motion of FUNCTION LEVER (4) that initiates operation of function. Projections of FUNCTION LEVER (4) move slides, bails, operate electric contacts, block other levers and engage latches. Studs and bails can be mounted on certain lever projections.

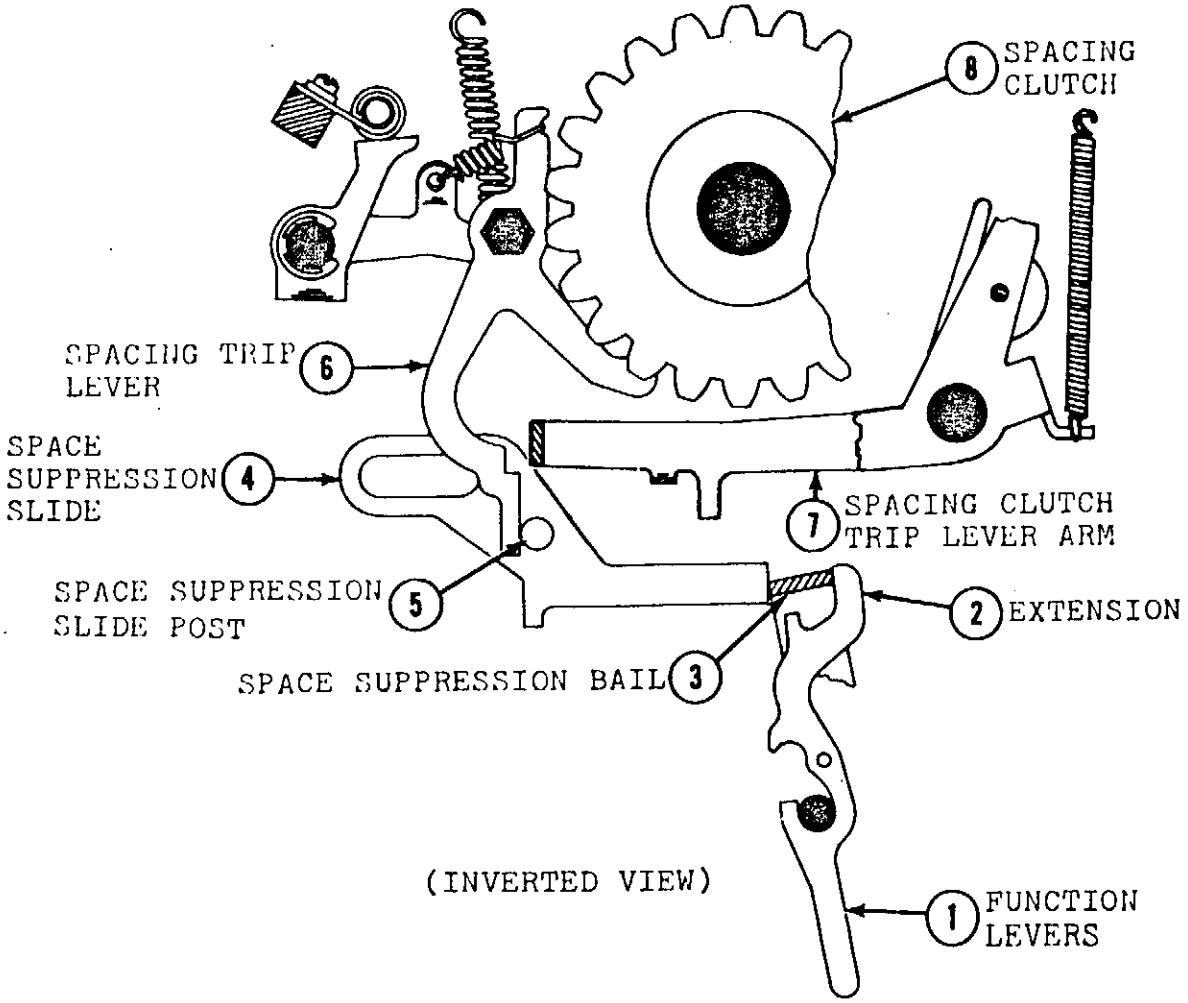


Function Clutch engages, ECCENTRIC ASSEMBLY (1) moves FUNCTION CLUTCH ASSEMBLY (2), which moves DRIVING LINK (3) and DRIVING ARM (4) upward, rotating SHAFT (5) and DRIVING CAM (6). DRIVING CAM (6) drives CAM ARM (7) and STRIPPER BLADE (8) down. During second one-half rotation of Function Clutch the above train of parts move back to their normal stop position, moving STRIPPER BLADE (8) up, completing the resetting or stripping phase of the function.

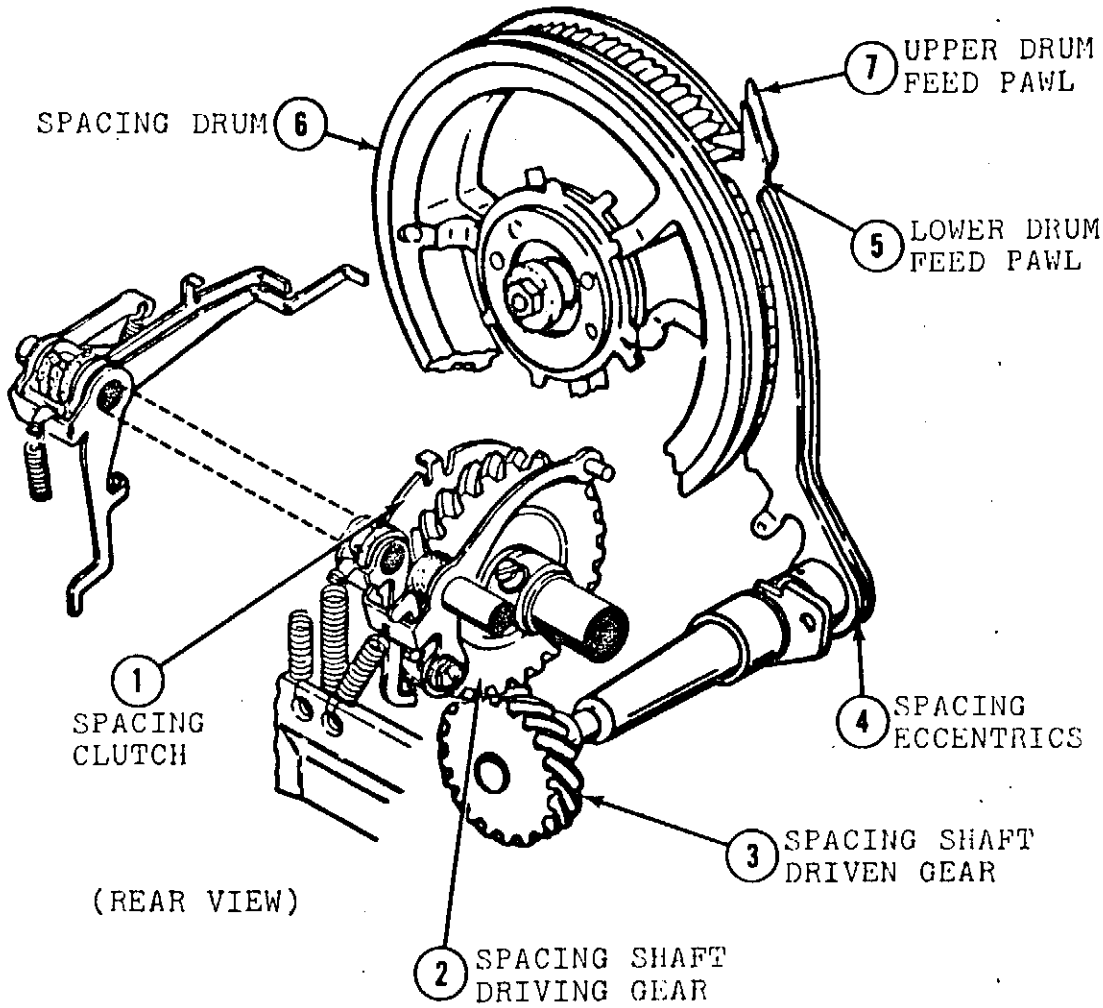


(INVERTED VIEW)

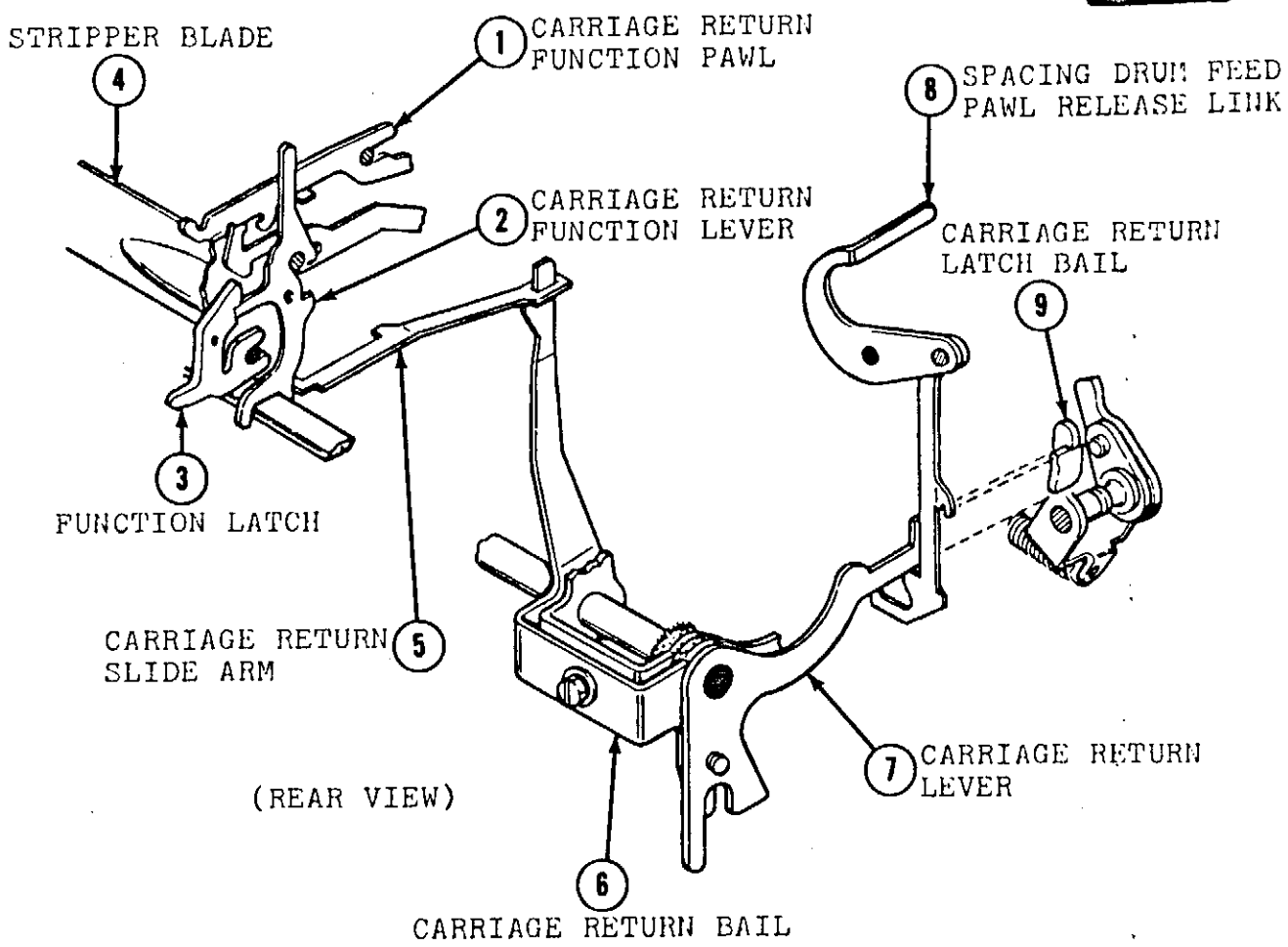
As MAIN ROCKER SHAFT (1) pivots, ROCKER SHAFT CAM PLATE (2) attached to it drives SPACING TRIP LEVER BAIL (3) and SPACING CLUTCH TRIP LEVER (4) downward latching SPACING CLUTCH TRIP LEVER ARM (5). When ROCKER SHAFT CAM PLATE (2) returns to its "home" position, spring tension on SPACING TRIP LEVER BAIL (3) and SPACING CLUTCH TRIP LEVER (4) pulls SPACING CLUTCH TRIP LEVER ARM (5) upward allowing SPACING CLUTCH TRIP LEVER (4) to move away engaging SPACING CLUTCH (6).



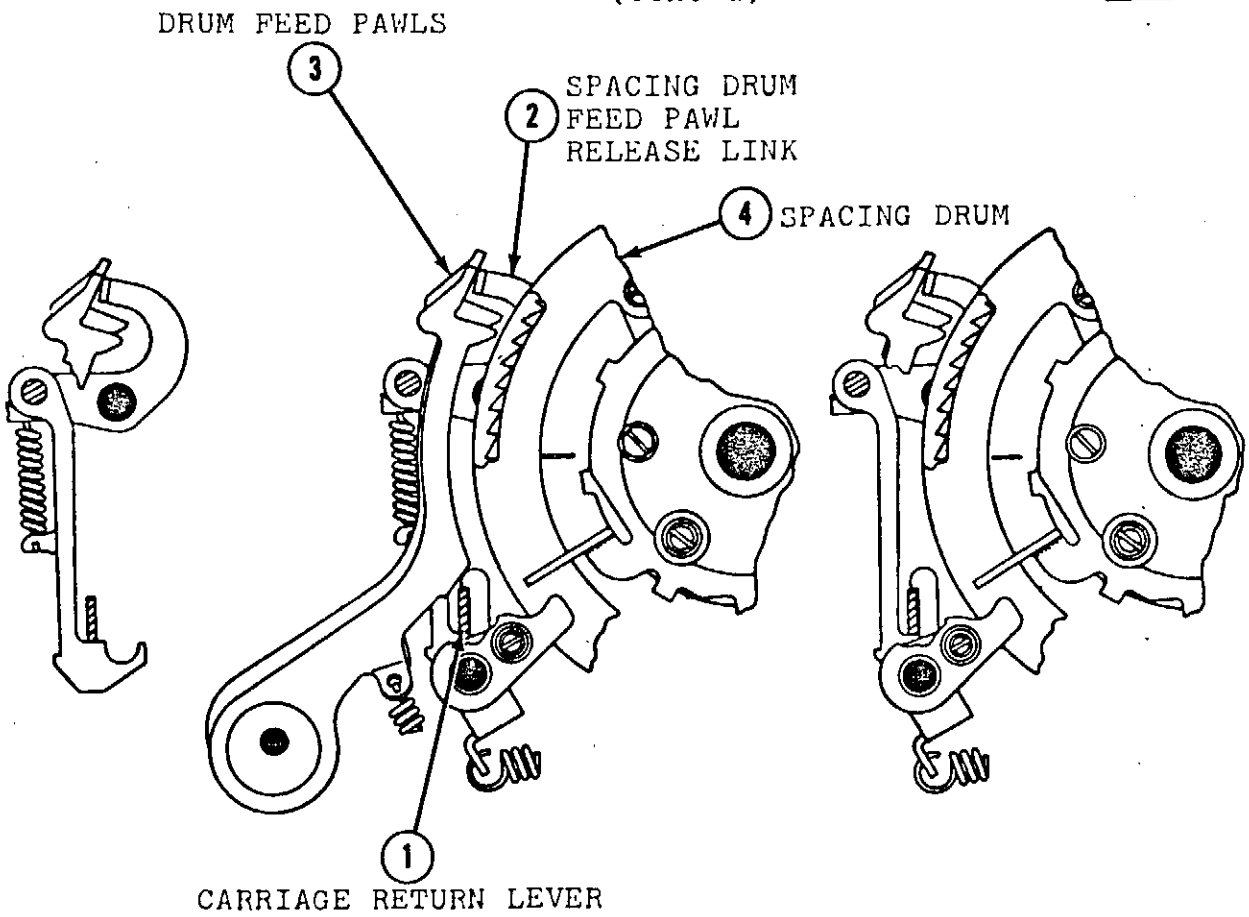
Space Suppression is used for certain non-printing and non-spacing functions. Those FUNCTION LEVERS (1) associated with non-printing and non-spacing functions have an EXTENSION (2) on lower end that, when operated, will operate SPACE SUPPRESSION BAIL (3) moving it forward engaging SPACE SUPPRESSION SLIDE (4) moving it forward. SPACE SUPPRESSION SLIDE POST (5) moves SPACING TRIP LEVER (6) forward preventing SPACING CLUTCH TRIP LEVER ARM (7) from becoming latched up. SPACING CLUTCH (8) cannot become engaged.



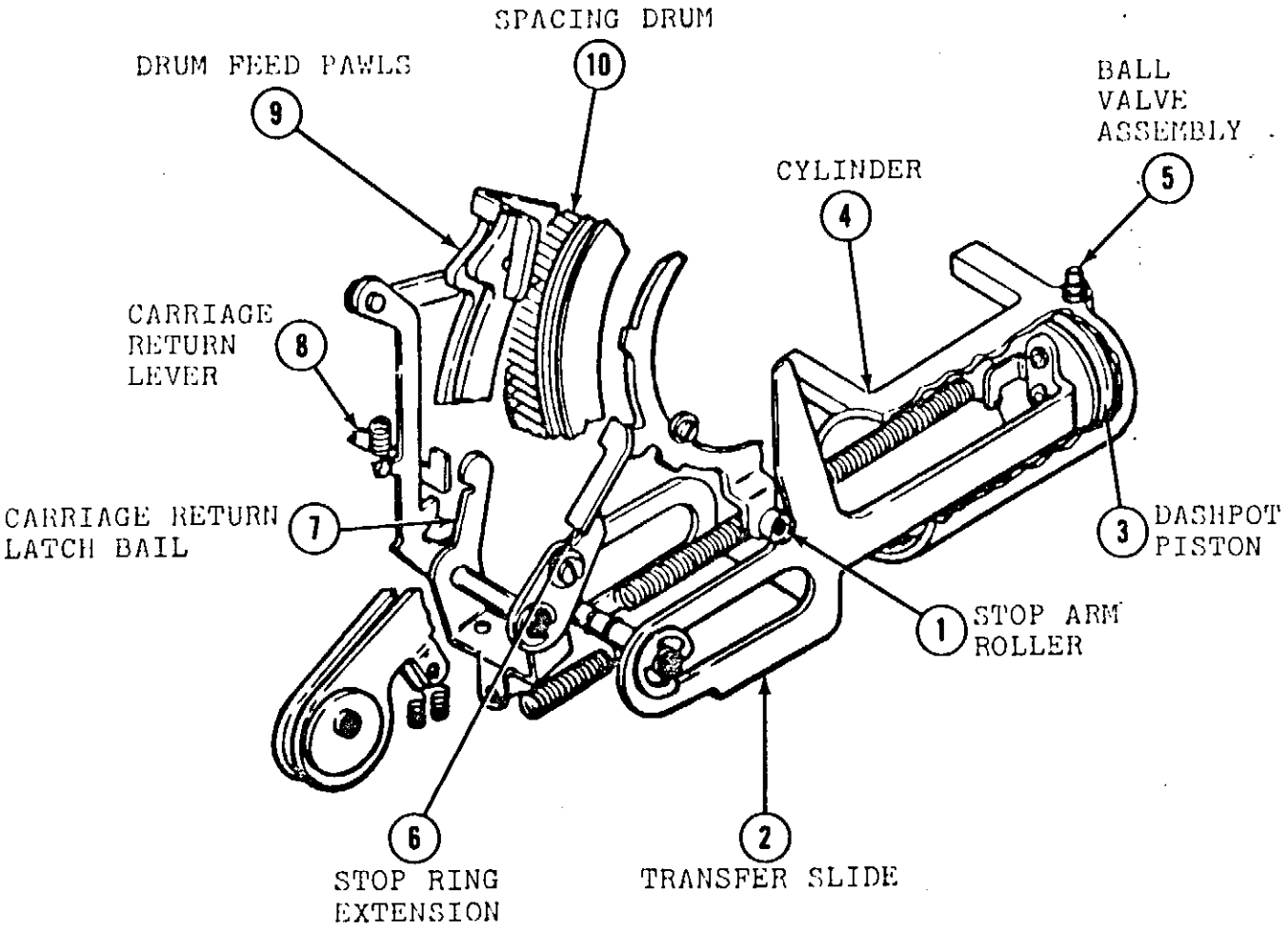
When SPACING CLUTCH (1) engages, its SPACING SHAFT DRIVING GEAR (2) rotates as part of SPACING CLUTCH (1) assembly to drive SPACING SHAFT DRIVEN GEAR (3). SPACING ECCENTRICS (4) will turn one-half revolution, moving LOWER DRUM FEED PAWL (5) upward to advance SPACING DRUM (6). UPPER DRUM FEED PAWL (7) moves down to engage next tooth.



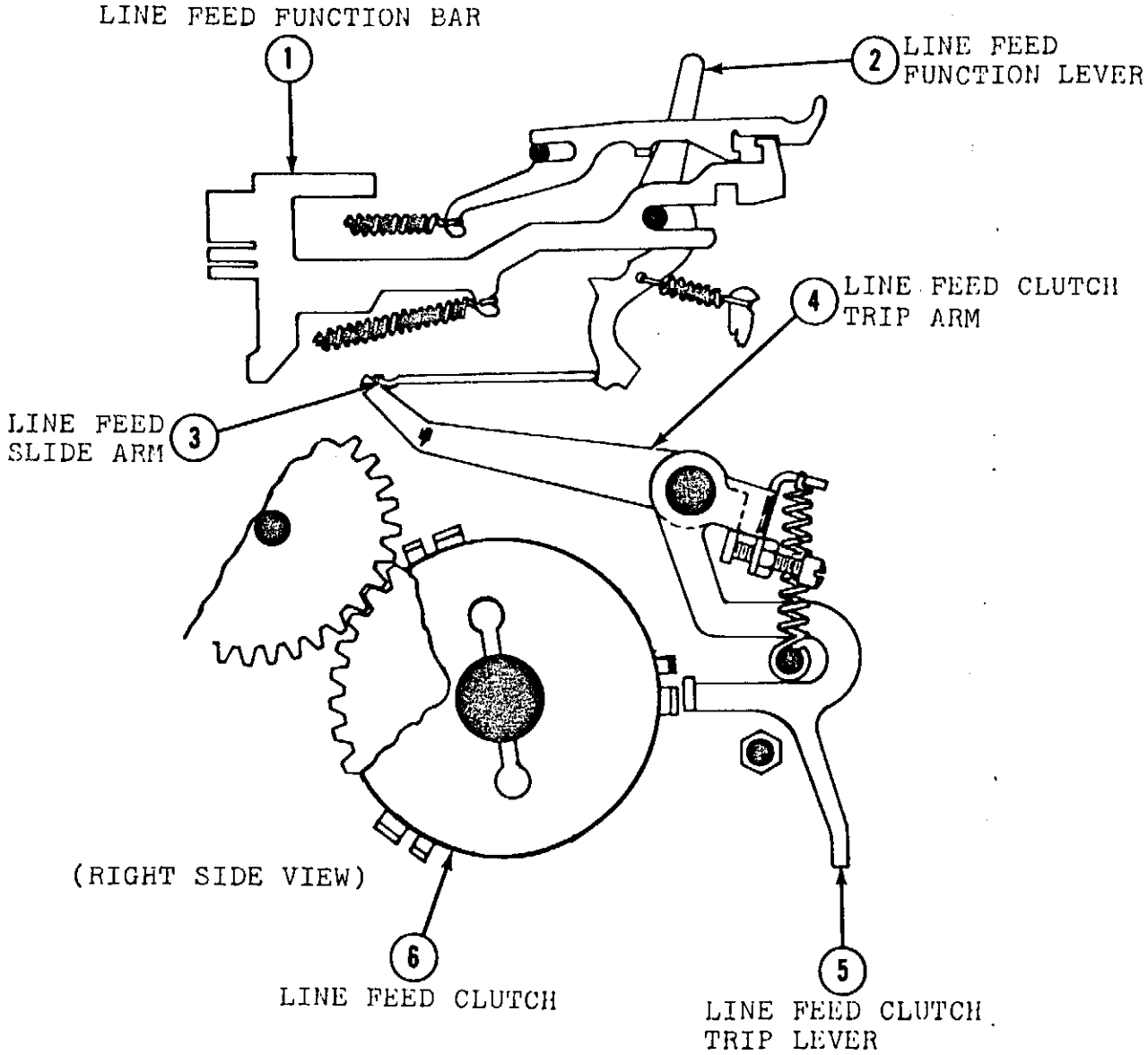
When Carriage Return Function is performed, CARRIAGE RETURN FUNCTION PAWL (1) pivots CARRIAGE RETURN FUNCTION LEVER (2). As CARRIAGE RETURN FUNCTION LEVER (2) pivots, a FUNCTION LATCH (3) latches CARRIAGE RETURN FUNCTION LEVER (2) keeping it pivoted until receipt of next character when Function Clutch moves STRIPPER BLADE (4) down stripping off operated FUNCTION LATCH (3). As CARRIAGE RETURN FUNCTION LEVER (2) pivoted, it drove CARRIAGE RETURN SLIDE ARM (5) forward pivoting CARRIAGE RETURN BAIL (6). CARRIAGE RETURN LEVER (7) moves down, pulling SPACING DRUM FEED PAWL RELEASE LINK (8) down, latching on CARRIAGE RETURN LATCH BAIL (9).



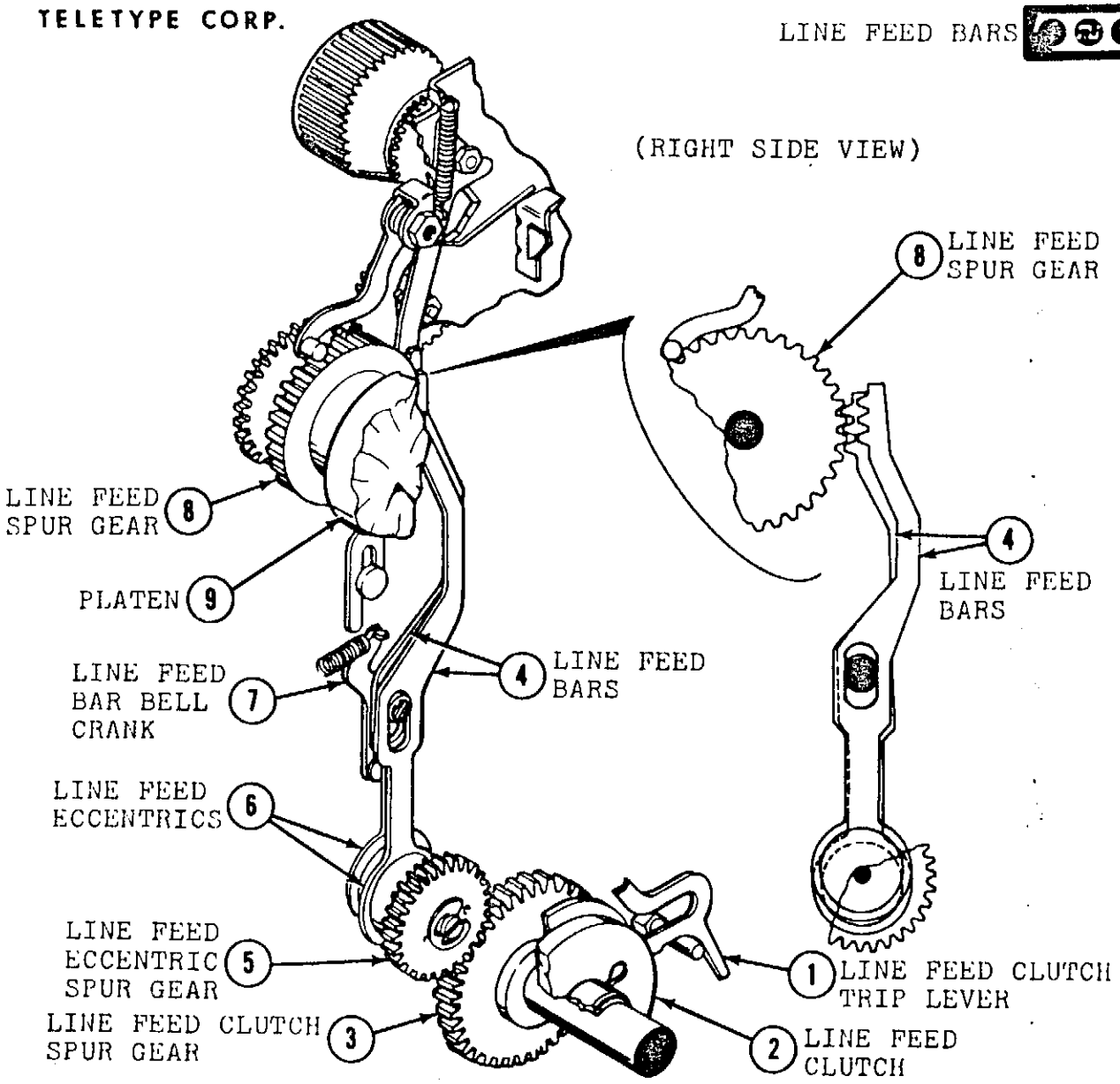
As CARRIAGE RETURN LEVER (1) moves down it strikes SPACING DRUM FEED PAWL RELEASE LINK (2), causing its upper portion to pivot pushing DRUM FEED PAWLS (3) away from SPACING DRUM (4).



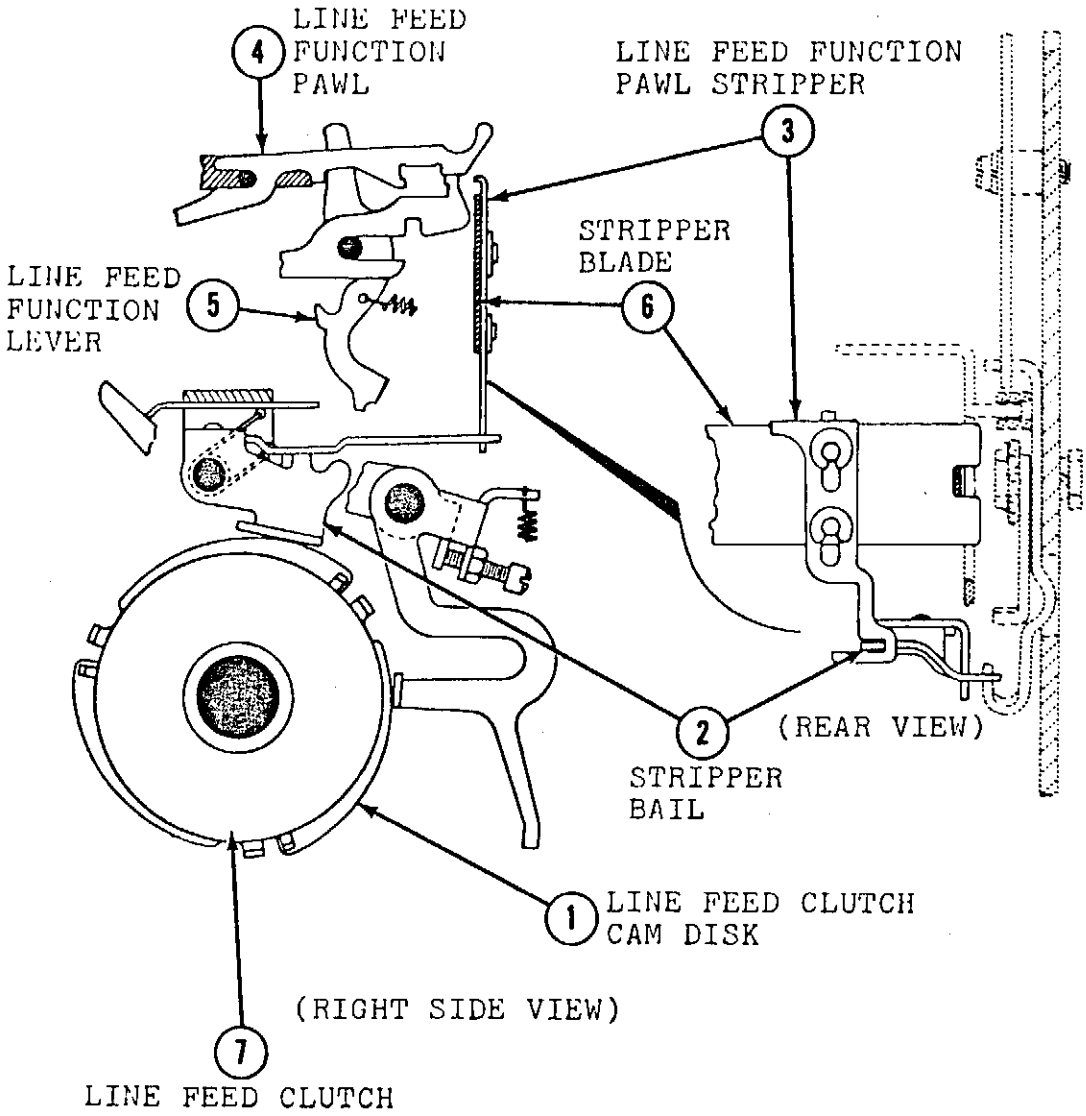
When carriage nears left margin, STOP ARM ROLLER (1) contacts TRANSFER SLIDE (2), driving DASHPOT PISTON (3) into CYLINDER (4) Air escapes from CYLINDER (4) through BALL VALVE ASSEMBLY (5). STOP RING EXTENSION (6) pivots CARRIAGE RETURN LATCH BAIL (7), releasing CARRIAGE RETURN LEVER (8). CARRIAGE RETURN LEVER (8) remains down until receipt of next character when Stripper Blade moves down striking Function Latch releasing Carriage Return Function Lever. At this time CARRIAGE RETURN LEVER (8) allows DRUM FEED PAWLS (9) to engage SPACING DRUM (10).



When LINE FEED FUNCTION BAR (1) becomes selected and moves to rear, lower end of LINE FEED FUNCTION LEVER (2) moves LINE FEED SLIDE ARM (3) forward, in turn, moves LINE FEED CLUTCH TRIP ARM (4) and LINE FEED CLUTCH TRIP LEVER (5) about their pivot point until LINE FEED CLUTCH TRIP LEVER (5) releases three-stop LINE FEED CLUTCH (6).

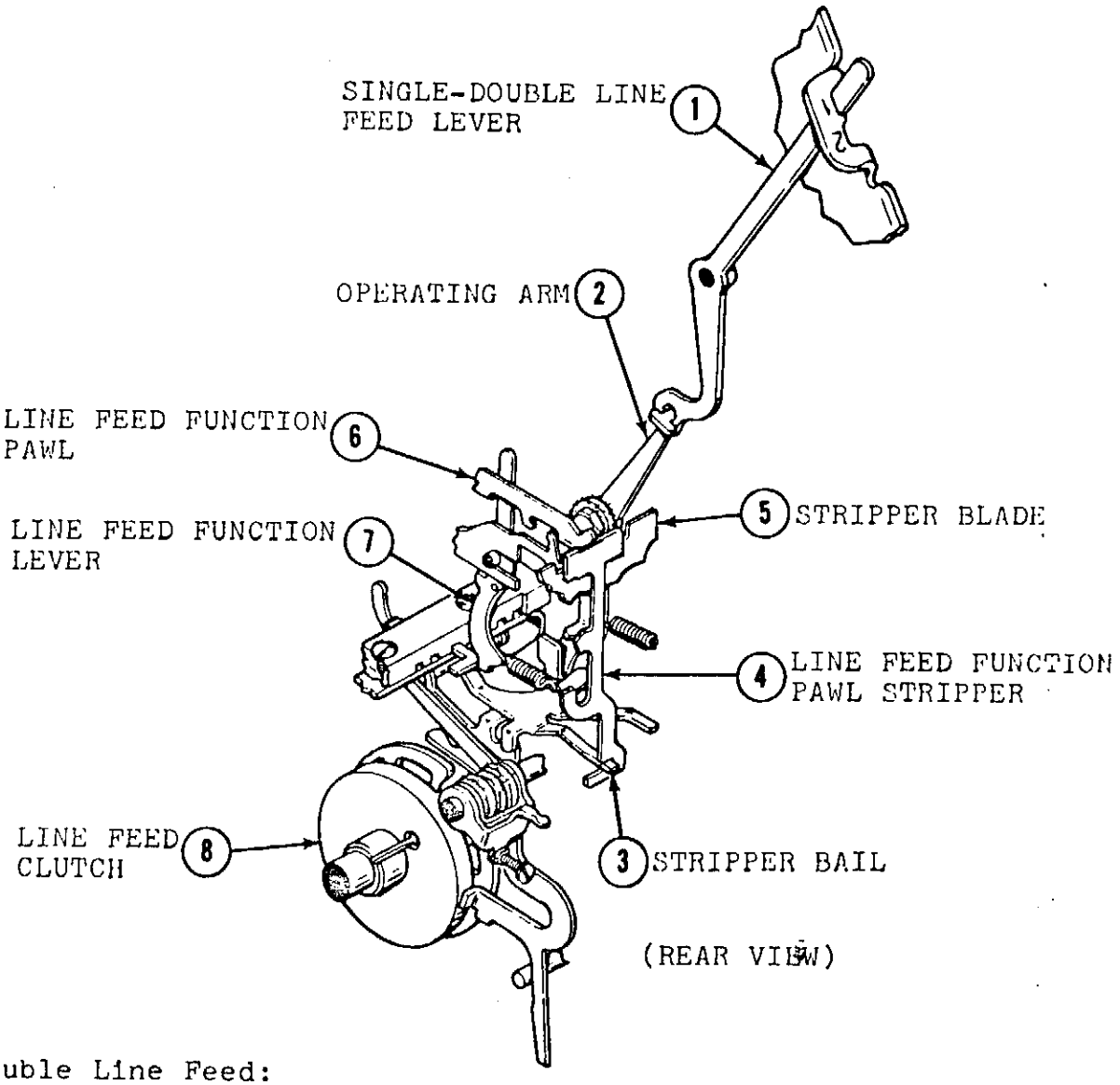


When LINE FEED CLUTCH TRIP LEVER (1) trips LINE FEED CLUTCH (2), LINE FEED CLUTCH SPUR GEAR (3) operates LINE FEED BARS (4) through LINE FEED ECCENTRIC SPUR GEAR (5) and LINE FEED ECCENTRICS (6). LINE FEED BAR BELL CRANK (7) insures that feeding LINE FEED BAR (4) is engaging LINE FEED SPUR GEAR (8) and that returning LINE FEED BAR (4) will clear LINE FEED SPUR GEAR (8). LINE FEED SPUR GEAR (8) and PLATEN (9) are bolted together and rotate as one unit to feed paper.



Single Line Feed:

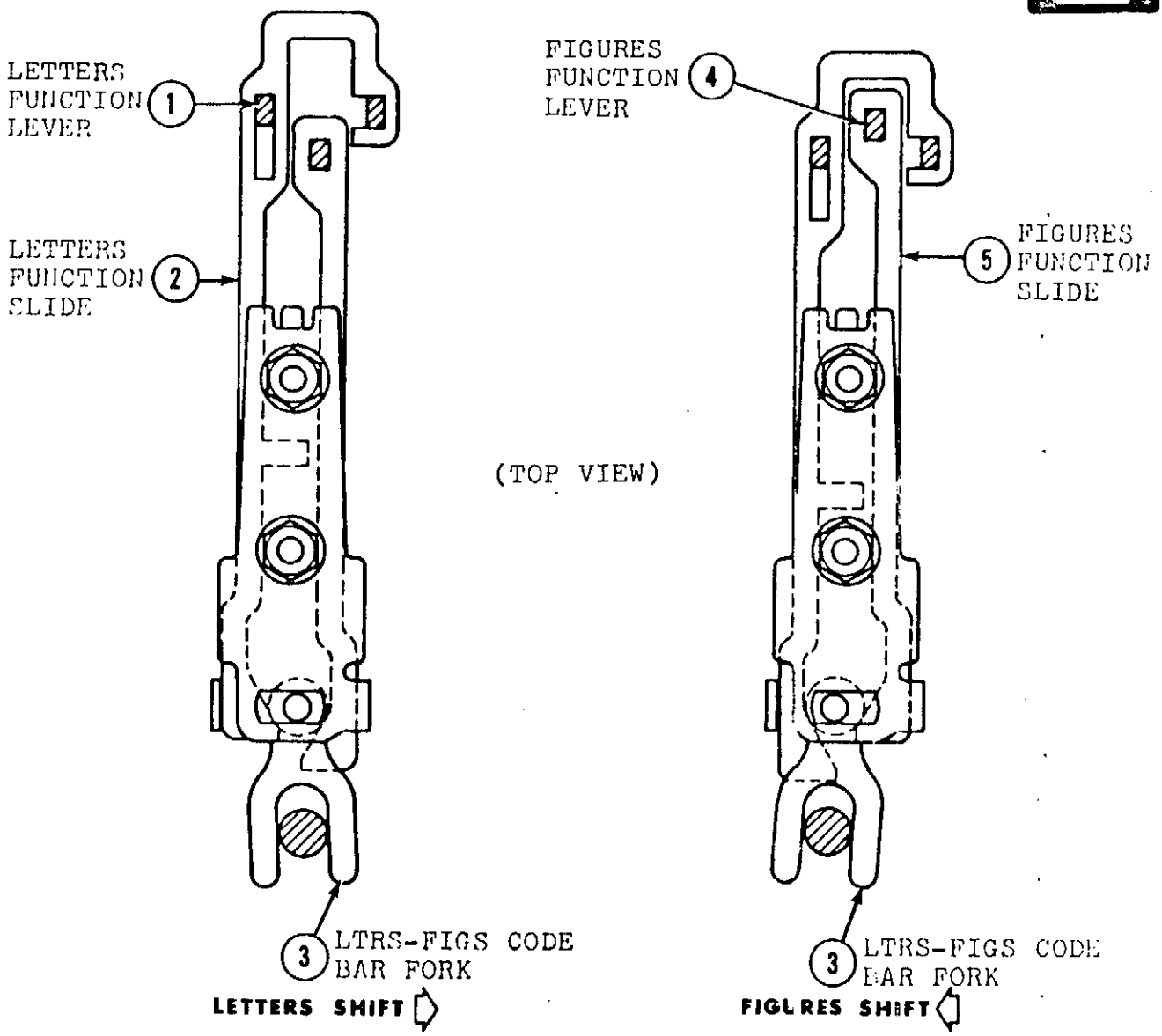
For Single Line Feed, LINE FEED CLUTCH CAM DISK (1) rotates allowing high part to move STRIPPER BAIL (2) and LINE FEED FUNCTION PAWL STRIPPER (3) up stripping LINE FEED FUNCTION PAWL (4) and releasing LINE FEED FUNCTION LEVER (5) before regular STRIPPER BLADE (6) does. This allows LINE FEED CLUTCH (7) to stop after one-third of a revolution. Gearing of Line Feed Mechanism is such that one-third revolution of LINE FEED CLUTCH (7) will advance Platen one line.



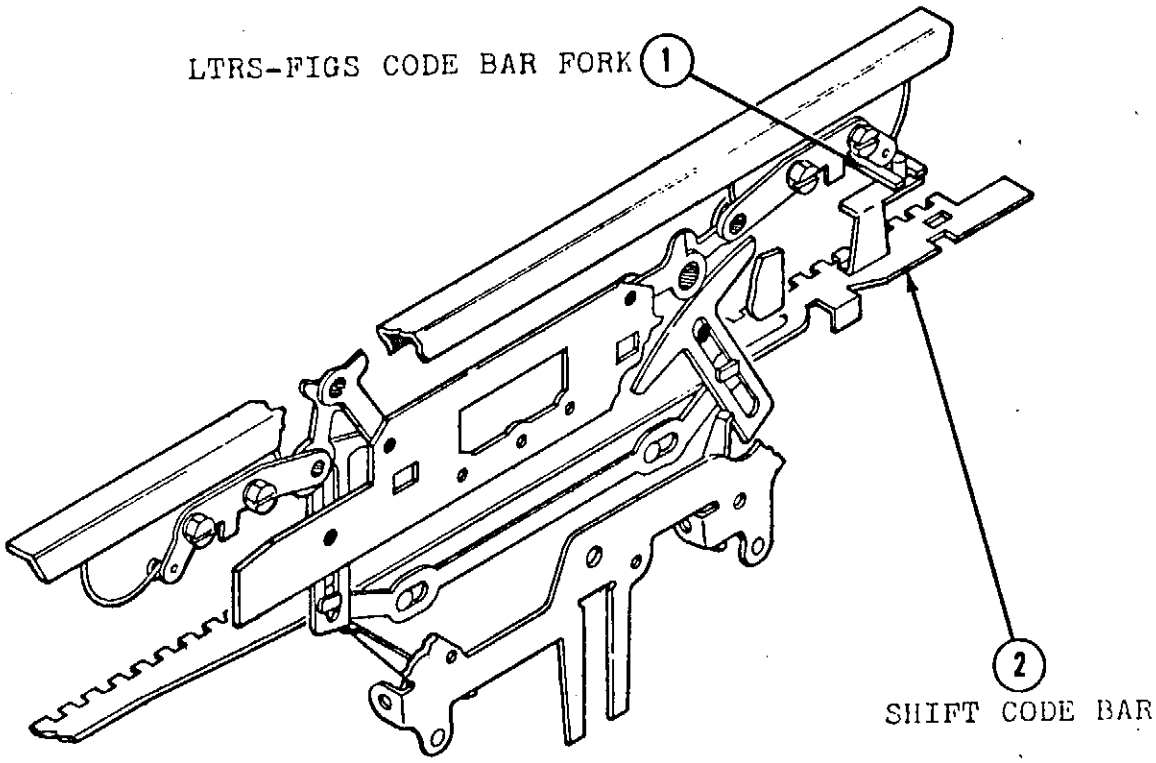
Double Line Feed:

For Double Line Feed move SINGLE-DOUBLE LINE FEED LEVER (1) to No. 2 position. This pivots SINGLE-DOUBLE LINE FEED LEVER (1) causing OPERATING ARM (2) to move STRIPPER BAIL (3) out of engagement with LINE FEED FUNCTION PAWL STRIPPER (4). At this time, STRIPPER BAIL (3) no longer moves LINE FEED FUNCTION PAWL STRIPPER (4). STRIPPER BLADE (5) now lifts LINE FEED FUNCTION PAWL STRIPPER (4) releasing LINE FEED FUNCTION PAWL (6) and LINE FEED FUNCTION LEVER (7). LINE FEED CLUTCH (8) stops after two-thirds of a revolution.

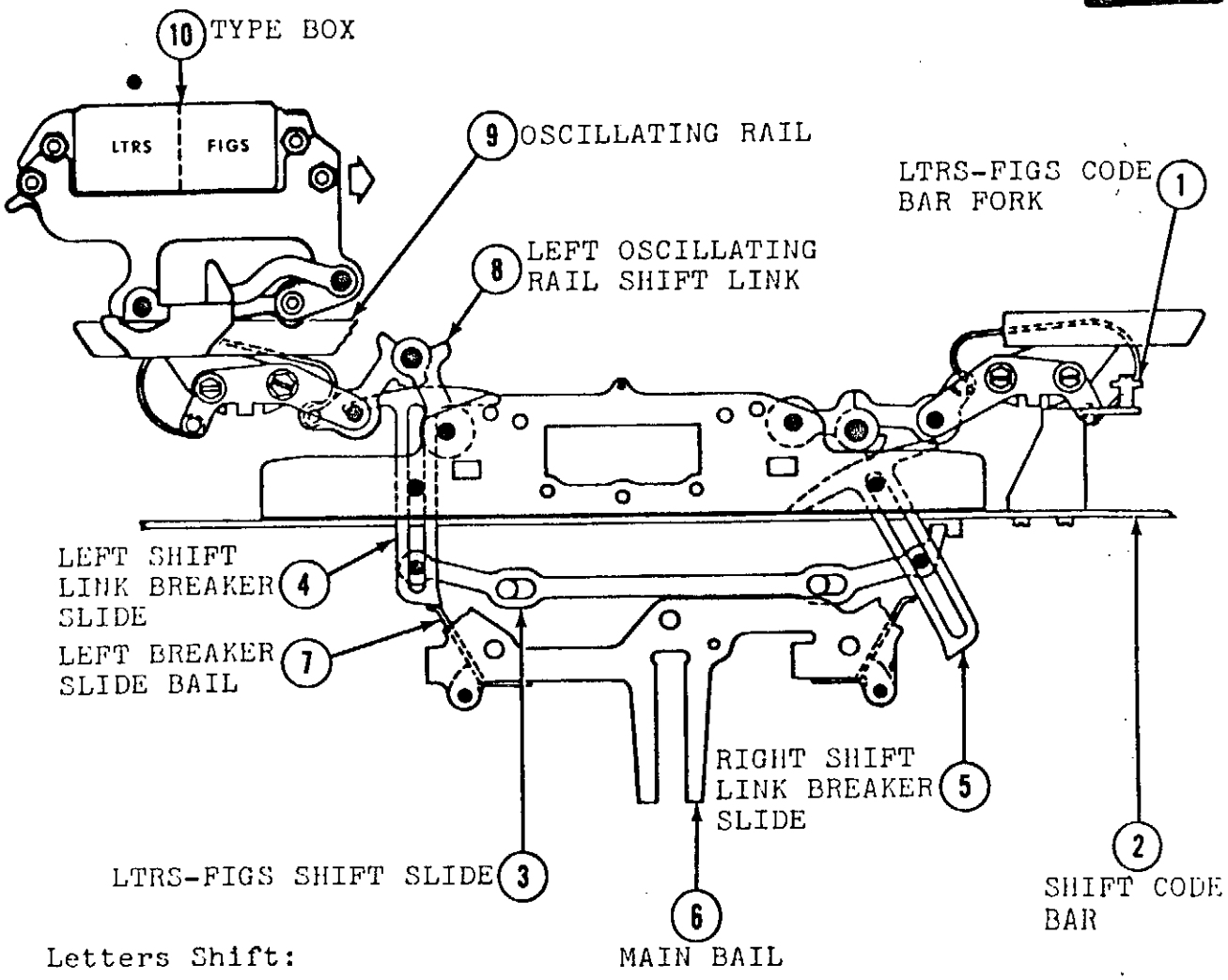
LETTERS--FIGURES SHIFT SLIDES



As Letters Function Bar becomes selected, LETTERS FUNCTION LEVER (1) pulls LETTERS FUNCTION SLIDE (2) rearward causing LTRS-FIGS CODE BAR FORK (3) to be cammed to right. When Figures Function Bar becomes selected, FIGURES FUNCTION LEVER (4) pulls FIGURES FUNCTION SLIDE (5) rearward causing LTRS-FIGS CODE BAR FORK (3) to be cammed to left.

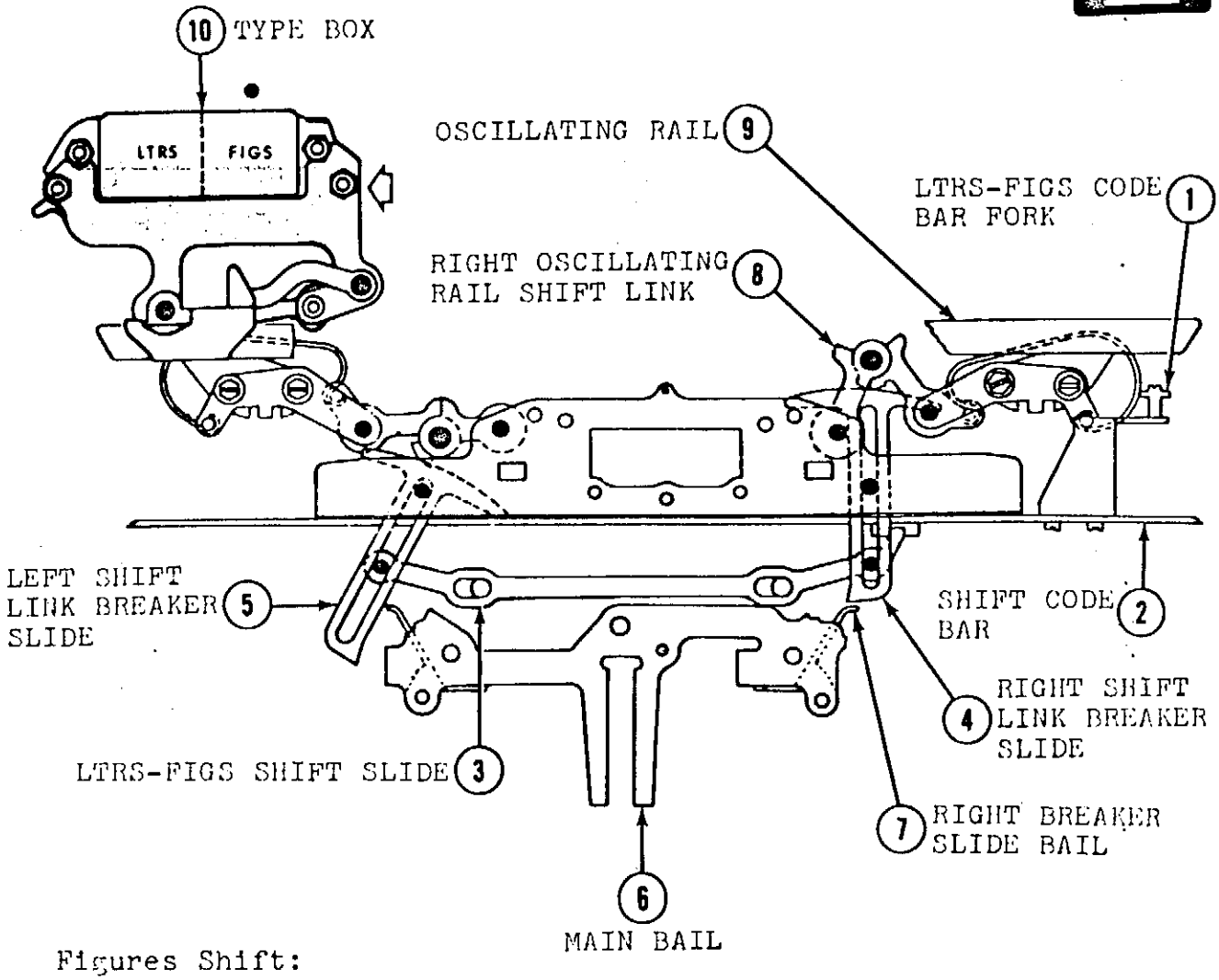


When Letters Function is received, LTRS-FIGS CODE BAR FORK (1) is cammed to right moving SHIFT CODE BAR (2) to right. When Figures Function is received, LTRS-FIGS CODE BAR FORK (1) is cammed to left moving SHIFT CODE BAR (2) to left.



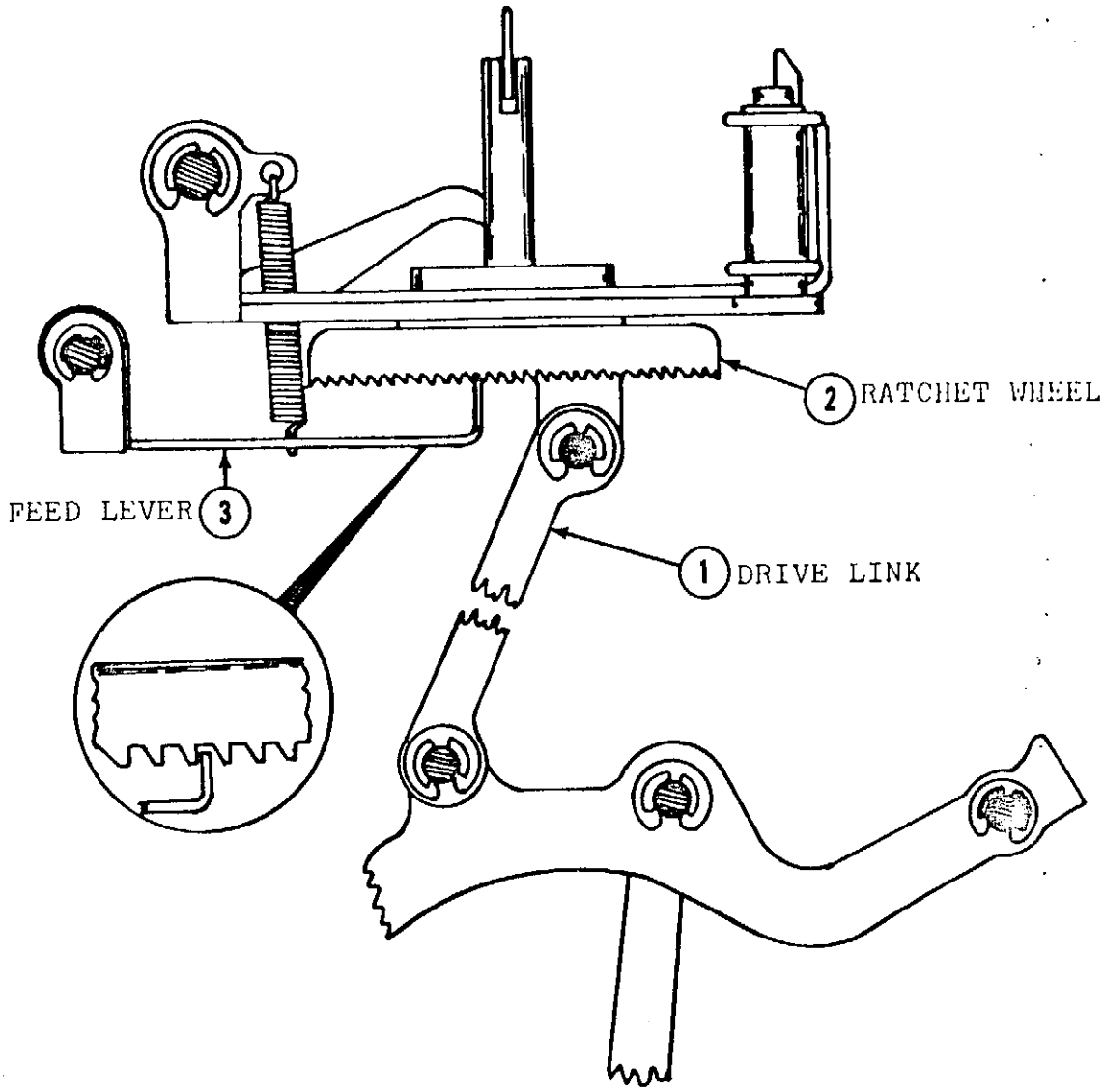
Letters Shift:

For Letters Shift, LTRS-FIGS CODE BAR FORK (1) moves SHIFT CODE BAR (2) and LTRS-FIGS SHIFT SLIDE (3) to right. LEFT SHIFT LINK BREAKER SLIDE (4) straightens and RIGHT SHIFT LINK BREAKER SLIDE (5) pivots. As MAIN BAIL (6) and LEFT BREAKER SLIDE BAIL (7) move up it moves LEFT SHIFT LINK BREAKER SLIDE (4) up buckling LEFT OSCILLATING RAIL SHIFT LINK (8) causing OSCILLATING RAIL (9) and TYPE BOX (10) to move right to Letters Position.



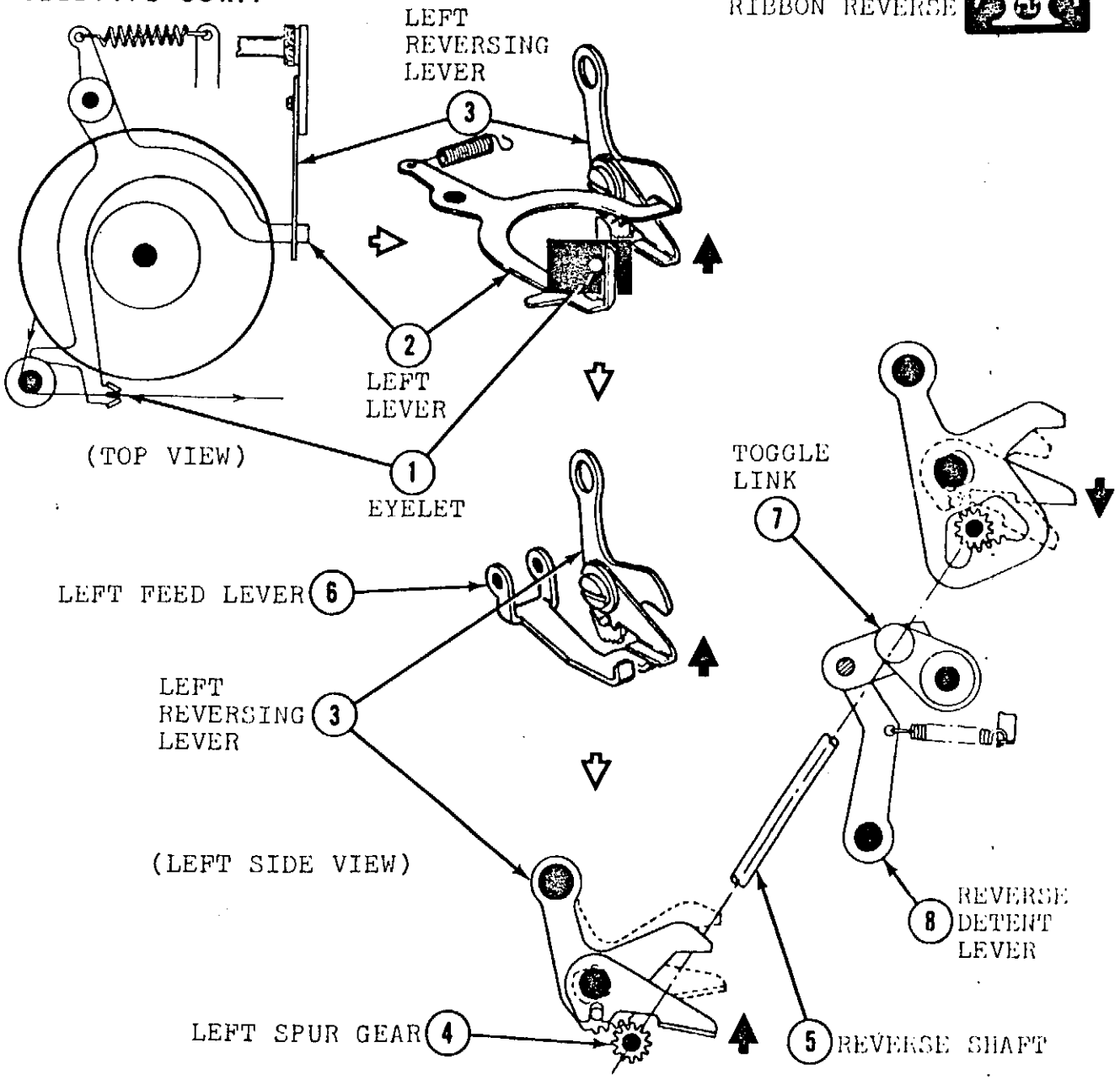
Figures Shift:

For Figures Shift, LTRS-FIGS CODE BAR FORK (1) moves SHIFT CODE BAR (2) and LTRS-FIGS SHIFT SLIDE (3) to left. RIGHT SHIFT LINK BREAKER SLIDE (4) straightens and LEFT SHIFT LINK BREAKER SLIDE (5) pivots. As MAIN BAIL (6) and RIGHT BREAKER SLIDE BAIL (7) move up it moves RIGHT SHIFT LINK BREAKER SLIDE (4) up buckling RIGHT OSCILLATING RAIL SHIFT LINK (8) causing OSCILLATING RAIL (9) and TYPE BOX (10) to move left to Figures Position.



(LEFT SIDE VIEW)

As DRIVE LINK (1) is moved upward, FEED LEVER (2) skips one tooth on RATCHET WHEEL (3) which is being held by a Detent Lever. DRIVE LINK (1) moving down causes FEED LEVER (2) to move RATCHET WHEEL (3) one space.



For ribbon reversal the EYELET (1) at end of ribbon pulls LEFT LEVER (2) under LEFT REVERSING LEVER (3). Upward travel of Drive Link causes LEFT REVERSING LEVER (3) to move upward rotating LEFT SPUR GEAR (4) and REVERSE SHAFT (5). This action allows LEFT FEED LEVER (6) to move up to engage Left Ratchet Wheel and Right Feed Lever to move out of engagement with Right Ratchet Wheel. The two mechanisms are held in position by TOGGLE LINK (7) and REVERSE DETENT LEVER (8).